

FOREST STEWARDSHIP PLAN

For:

PRIDE OF THE WEST

Kate Sparks  
161 Boulder View Road  
Boulder, CO 80302

Pride of the West  
Located in the  
SE1/4, Sec 25, T1N, R72W, S.P.M.

Prepared By:

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November 4, 1992

This management plan has been prepared at my request to guide my Stewardship management activities which I voluntarily apply on my property. I believe that activities recommended in this plan are appropriate to meet my objectives and will benefit the natural resources on my property. I intend to apply the recommended practices and to maintain them for a period of at least ten years, thus helping me to be a good steward of the forest and associated resources entrusted to me on my property.

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Kate Sparks

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Date

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OBJECTIVES: The forestry objectives for this property are:

1. Consistent with requirements of the Stewardship Incentives Program, to re-establish a forest on this property, which was burned in the Black Tiger Fire.
2. To establish a windbreak planting along the west and north sides of the property.
3. Preserve the aesthetic qualities of the property.
4. Protect the soil and water resources of the property.

AREA: The property contains 2.8 acres, of which none is forested:

Windbreak	0.4 acres
House and Yard	1.0 acres
Burned Area	<u>1.4</u> acres
	2.8 acres

PROPERTY LOCATION: The Pride of the West is located on the east side of Boulder View Road, about 0.2 miles from Sugarloaf Road and about 3.5 miles from Boulder Canyon.

BOUNDARY MONUMENTS: All corners are marked with iron rebars except those adjoining the road right-of-way.

ACCESS: The driveway from Boulder View Road is the only feasible access. To plant the back (east) end of the lot, pickup access around the south end of the house may be possible.

TOPOGRAPHY: The property stands on an east-facing hill. Elevation is about 7540 feet above sea level. Aspect is southeast. Slope averages 30%.

GEOLOGY: Precambrian rocks now about 1.8 billion years old were intruded about 1.7 billion years ago by the Boulder Creek Grano-

diorite Formation. This formation is bedrock throughout the property.

North-northwest trending faults of Precambrian Age pass near the property, but do not cross it. These faults have occasionally been reactivated.

Lower Paleozoic rocks (Cambrian through Mississippian) are missing in this area. It is thought that these rocks once existed, but were eroded away during Early Pennsylvanian times when the Boulder area was uplifted on the northeast flank of the Ancestral Front Range uplift, one of several northwest-trending mountain ranges that comprised the late Paleozoic Ancestral Rocky Mountains. These mountains (Ouachita Orogeny) resulted from the reactivation of Precambrian structures when Africa collided with South America and the southern edge of North America. Gravel and sediments washing off the Ancestral Front Range were deposited as the Fountain Formation which was later uplifted to form the Flatirons. By the late Paleozoic period the Ancestral Front Range was eroded to a set of low hills.

In the Early Cretaceous period the area began to subside and was eventually buried under almost 10,000 feet of marine sediment.

In the Late Cretaceous-Early Tertiary period (about 67.5 million years ago), the Laramide Orogeny uplifted a mountain range with much the same configuration as the present day Front Range. Erosion about balanced uplift so that the relief was never great, much less than at present. By the Late Eocene period the uplift ceased, leaving a low-profile range of hills. Most of the faulting and eastward tilting that raised the Flatirons into position occurred during the Laramide Orogeny.

Intrusive volcanic activity occurred to the east during the Paleocene period, but apparently did not involve this property.

During the Oligocene period this region was reduced to a plain, similar to eastern Colorado today with an elevation of about 3000 feet. In the Miocene period, thermal uplift and east-west expansion formed the Rio Grande Rift and began the rise of the modern Front Range, which continues to rise today.

Though this property was never glaciated (The nearest glacier reached Nederland.).

SOILS: Soil maps for the western part of Boulder County have not been published; Soil Conservation Service agronomists are in the process of doing this at this time. The following is my attempt at soil identification and may not be completely accurate.

Allensparks soils occur in loamy colluvium and residuum weathered from granite. Depth to bedrock is about 26 inches. Available water capacity is low.

Juget soils are shallow, excessively drained soils formed on mountain slopes and ridges in sandy residuum weathered from granite. It has a low available water capacity. Depth to bedrock is only eleven inches.

**HISTORICAL LAND USE:** The site is a mine claim. Most claims in this area were first made in the 1850s. There have been sporadic attempts to develop the minerals over the years, but nothing has been successful.

Fires have been very common. A study of fire scars in nearby Sunshine Canyon, indicated no fewer than fifteen fires during the life of trees still living. From 1870 to 1920, the area burned, on average, once every 5.5 years. No samples were taken to determine fire history on this property, for fear of harming the few remaining trees still further.

**DESIRED CONDITION:** A healthy, vigorous, fully-stocked stand of trees screening the house from the road is desired. Visual impacts are an important consideration. A stand of pines here, would provide needed animal shelter.

**IMPACT ON NEIGHBORS & NEARBY COMMUNITIES:** Impact on nearby properties will be minimal. There will be no cutting. The new seedling stand will develop so slowly that most neighbors will not notice it.

**WILDLIFE:** Numerous deer have been observed using the spring southeast of the property. The property is not large enough for management activities to have a significant impact on deer or elk. There is a shortage of living space for cavity-nesting birds.

**Threatened or Endangered Species:** The property is located in Block B11. Protected species in this block are:

1. the American peregrine falcon
2. the bald eagle
3. the interior least tern and
4. the greenback cutthroat trout.

For the most part, these species do not make use of the area. The tern is a shore bird and prefers large lakes; and there are no creeks or wetlands.

Eagles visit Boulder in winter, staying in the piedmont area with its milder weather and migrating north when weather improves. Boulder is on the extreme southern end of the eagle's summer (nesting) range. Occasionally a pair will nest in the area, but it is very unusual.

The property is within the foraging area of a known peregrine falcon nest, but there are no nesting sites on the property.

Wildlife Habitat Opportunities: There are a number of practices that could be implemented to enhance the property's usefulness to various species of wildlife. Several ideas are:

1. Nesting boxes for birds could increase use of the property by cavity-nesters. The fire eliminated nesting sites over thousands of acres. Some replacement sites are needed. Three boxes located at the extreme corners of the property would be about as many as could be fully utilized.
2. A reforestation planting would provide shelter for birds, deer and small game.

These practices are a few of the possibilities. There are many others that you might consider for animals other than deer and elk. The Colorado State Forest Service has an inch-thick book listing various wildlife practices.

Forester's Note: Deer and elk attract mountain lions which then prey upon deer, elk, cats, dogs, stray joggers and have been known to attack children. You may want to reconsider your choice of deer as the species you will manage for (Although, your property is so small that whatever you do is likely to have little effect on deer.).

INVENTORY: The property is in the ponderosa pine/Douglas-fir/Arizona fescue ecotype. Except for a tiny few, the fire eliminated most trees on the property.

## PLANTING PROJECTS:

## Windbreak:

Purpose: To provide a barrier that, given topographical restrictions, will protect the house from westerly winds.

Description: This barrier is designed as a three-row windbreak. It is L-shaped, standing at the northwest corner of the property. There is a gap for the driveway at the corner. Across the road is a stand of natural Douglas-fir saplings that survived the fire. They will shelter the driveway most of the time. The planting is 554 feet long; the north leg, along the north property line, is 289 feet long; the west leg, along the road, is 265 feet long. The planting occupies 0.6 acres. Rows are eight feet apart, with shrubs spaced four feet apart, junipers spaced six feet apart, and pines spaced eight feet apart in the rows. Weed barrier (fabric mulch) is used to suppress grass competition. Polymer is not being used. The planting requires 138 shrubs (lilacs), 92 Rocky Mountain junipers and 69 ponderosa pines. It is eligible for Stewardship Incentives cost-sharing as a farmstead windbreak. Costs are summarized below:

## North Leg:

72 lilacs @ \$0.38 ea.:	\$ 27.36
92 Large-pot RMJ @ \$0.90 ea.:	82.80
36 Large-pot ponderosa pines @ \$0.90 ea.:	32.40
92 Tubex tubes @ \$2.75 ea.:	253.00
3 6'X300' rolls weed barrier @ \$108.50 ea.:	<u>325.50</u>
SUB-TOTAL	\$ 721.06
Sales Tax (3%)	<u>21.63</u>
TOTAL, MATERIALS	\$ 742.69
Labor, Planting - 233 trees @ \$1.00 ea.:	233.00
Labor, Weed Barrier - 233 trees @ \$2.00 ea.:	<u>466.00</u>
GRAND TOTAL	\$1441.69

## COST-SHARING:

	Total Cost	C/S	Net
Seedlings & Labor:	\$ 640.43	\$135.00	\$505.43
Weed Barrier & Labor:	<u>801.27</u>	<u>232.50</u>	<u>568.77</u>
TOTAL*	\$1441.69	\$300.00	\$1141.69

\*When there is a cost-sharing limitation, the amount imposed by the limitation is used; thus, in this table, ordinary arithmetic does not work.

## West leg:

66 lilacs @ \$0.38 ea.:	\$ 25.08
44 Large-pot Rocky Mtn. junipers @ \$0.90 ea.:	39.60
33 Large-pot ponderosa pines @ \$0.90 ea.:	29.70
90 Tubex tubes @ \$2.75 ea.:	121.00
3.0 Rolls Weed Barrier @ \$108.50 ea.:	<u>325.50</u>
SUB-TOTAL	\$ 540.88
Sales Tax (3%)	<u>16.23</u>
TOTAL, MATERIALS	\$ 557.11
Labor, Planting - 143 trees @ \$1.00 ea.:	143.00
Labor, Weed Barrier - 143 trees @ \$2.00 ea.:	<u>286.00</u>
GRAND TOTAL	\$ 986.11

## COST-SHARING:

	Total Cost	C/S	Net
Seedlings, Labor:	\$ 364.84	\$ 135.00	\$ 229.84
Weed Barrier, Labor:	<u>621.27</u>	<u>232.50</u>	<u>388.77</u>
TOTAL*	\$ 986.11	\$ 300.00	\$ 686.11

\* See above.

## Reforestation:

Purpose: To protect against upslope winds, provide shelter for animals and a screen around the back yard.

Description: This is a 1.2-acre reforestation planting to replace trees killed by the Black Tiger Fire. In order to achieve proper density, 570 ponderosa pine seedlings will be needed. These should be planted on a 9.5' square spacing. Dalapon or Roundup treatments may be needed to suppress grass competition. The circular open area around the house is just a suggestion; the open area could be any shape.

Because reforestation planting has a high net cost, an alternative approach is to seed the area with tree seeds. This is much cheaper. The site will need to be prepared with either chemical or mechanical scarification in June. The following November, tree seeds can be spread over the site. Both alternatives are outlined below.

## Reforestation Planting:

570 Large-pot ponderosa pines @ \$0.90 ea.:	\$ 513.00
1 gallon Roundup @ \$110.25 ea.:	<u>110.25</u>
SUB-TOTAL	\$ 623.25
Sales Tax (3%)	<u>18.70</u>
TOTAL, MATERIALS	\$ 641.95
Labor, Planting - 570 trees @ \$1.00 ea.:	570.00
Labor, apply Roundup - 570 trees @ \$0.50 ea.:	<u>285.00</u>
GRAND TOTAL	\$1496.95

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## COST-SHARING:

	Total Cost	C/S	Net
Heavy Site Prep & Plant	\$1496.95	\$ 492.00	\$1004.95

## Reforestation Seeding (Prices uncertain):

2.5 Pounds ponderosa seed @ \$67.20 per pound:	\$ 168.00
15 Pounds dalapon @ \$15.00 per pound:	<u>225.00</u>
SUB-TOTAL	\$ 393.00
Sales Tax (3%)	<u>11.79</u>
TOTAL, MATERIALS	\$ 404.79
Labor, Apply dalapon - 1.2 acres	160.00
Labor, Apply Seed - 1.2 acres	<u>50.00</u>
GRAND TOTAL	\$ 614.79

## COST-SHARING:

	Total Cost	C/S	Net
Heavy Site Prep & Seed	\$ 614.79	\$ 114.00	\$ 500.79

## Forester's Notes:

1. Labor is shown as a cost in all of the above because labor is cost-shared. This includes your own labor. If you plan to do the work yourself, subtract labor from the cost-sharing net figure to obtain an estimate of your out-of-pocket net cost.
2. Seedling prices are based on CSFS' 1993 price list. Eight-foot-width weed barrier is based on Boulder District's 1993 price. Other prices are based on 1992 figures and may not be current.

## IMPLEMENTATION SCHEDULE:

- 1993: Plant windbreak and reforestation plantings.
- 1994: Maintain all plantings, replace dead or missing seedlings in windbreak. Replace dead or missing seedlings in reforestation planting/seeding only if total stocking has fallen below 390 seedlings. These practices are eligible for cost-sharing and are generally more favorable to landowners than the original planting/seeding.
- 1995: Same as 1994.
- 1996: Same as 1994.
- 1997: Same as 1994. By this time both plantings should be established and in no further need of replacements and maintenance. This is the last maintenance that is eligible for cost-sharing. Further maintenance work is

entirely at your own expense.

- 1998: Wildlife Practice. Install bird boxes (3). This is eligible for cost-sharing, although you may not find the cost-sharing for three bird boxes (\$60.00) worth driving to Longmont to sign up for.
- 1999: Maintain all practices.
- 2000: Maintain all practices.
- 2001: Maintain all practices.
- 2002: Maintain all practices.
- 2003: Maintain all practices. Cost-sharing Agreement for plantings expires on September 30, 2003.
- 2004 - 2008: Maintain wildlife practice. Cost-sharing Agreement (if applicable) expires on September 30, 2008.

Part of each cost-sharing Agreement is a requirement to maintain the practice. This includes retaining ownership of the land on which the practice stands. If the property is sold, the new owner can sign an agreement to continue maintenance until the expiration date, thus relieving you of any further obligation. Another way out is to reimburse the cost-sharing money, plus interest.

For many years to come, you can enjoy your property. With people like you taking care of our forests, their well-being is assured.

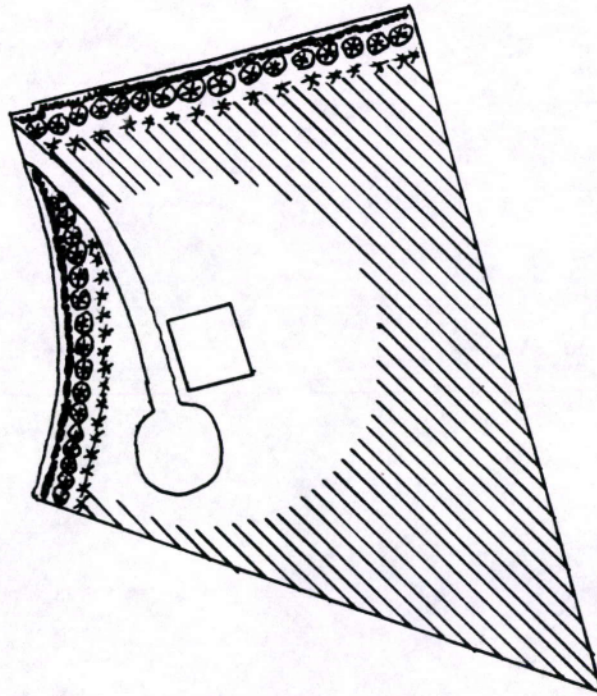
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Respectfully submitted by,

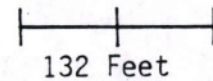


Douglas J. Stevenson  
Assistant District Forester

# Pride of the West



2 Chains



## Kate Sparks

- Property Line
- === Driveway
- House
- ⊗ Windbreak
- /// Reforestation

Drawn By:

*Douglas Stevenson*

November 4, 1992