

Forest Stewardship Assistance

All programs and assistance are offered on a nondiscriminatory basis without regard to race, color, national origin, religion, sex, age, marital status, or handicap.



Name Ellen Malmquist
Address 6977 Marshall Dr City Boulder
State Co Zip code 803039514 Phone 303 4999212

I recognize that ownership of my property not only grants me the right to manage this property for my benefit, but also carries with it the responsibility to be a good steward of the land and the natural resources on it. As a good steward I wish to improve the productivity, enhance the natural resources, and preserve future options for the use of this property.

The legal description of my property is _____, section _____, township _____, range _____, _____ principal meridian, _____ County, Colorado. Acres of forest land: _____, acres of land suitable for growing trees: _____, total stewardship acres: _____.

My objectives for forest stewardship management are:

- ☐ healthy forest
- ☒ aesthetics
- ☐ insect and disease control
- ☐ fire prevention and fuel reduction
- ☒ wildlife habitat improvement for (species) phensnts
- ☒ soil & water protection or improvement
- ☐ riparian area improvement
- ☐ grazing improvement
- ☒ forest products
- ☐ forest agriculture (property tax) classification
- ☒ conservation planting for:
 - ☒ windbreak or shelterbelt
 - ☐ screening
 - ☒ noise abatement
 - ☐ wildlife habitat for (species) _____
 - ☐ Christmas trees
 - ☒ erosion control
 - ☐ reforestation
- ☐ other (specify) _____

In order to be a good steward of my property I am requesting the assistance of _____ to help me develop a stewardship plan to guide me in the managing the resources entrusted to me. I understand that this plan may qualify me for Stewardship Incentive Program (SIP) cost sharing.

Ellen Malmquist
Landowner's signature

2/92
date

FOREST STEWARDSHIP PLAN

for

ELLEN MALMQUIST

E1/2 SE1/4 SW1/4 NE1/4, Sec 14, T1S, R70W, S.P.M.

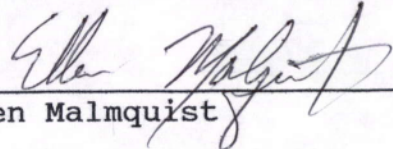
(5 Acres)

Prepared By:

Douglas J. Stevenson
Colorado State Forest Service
936 Lefthand Canyon
Boulder, CO 80302
(303) 442-0428

March 10, 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.



Ellen Malmquist

3/92

Date

OBJECTIVE

To create a windbreak for the house and its vicinity.

DESCRIPTION

Location

The property is located on the west side of Red Ash Lane, on the north side of CO-170, about 1.5 miles west of the intersection with US-36.

There is a tract of Boulder Open Space land across the road to the east (Open Space land does not qualify for cost-sharing funds under the Stewardship Incentives Program [SIP].). A water line crosses the northwest corner of the property.

Annual precipitation is about 15 inches. There are no noxious weeds present on site. Access via Red Ash Lane is excellent. The land currently supports a native grass sod with interspersed yuccas. No change in land use is anticipated.

Geologically, this site is located on Verdos alluvium and dates from the Kansan or Yarmouth glacial epoch, about 600,000 years ago. It is composed of brown sand and gravel which consists of partly decomposed pebbles, cobbles and boulders of igneous, metamorphic and sedimentary rock in a clay matrix. There is a white rhyolitic volcanic ash bed located near the base of the unit. The soil is Valmont cobbly clay loam with a calcareous layer at depths of 35 to 60 inches. This is an extremely strong soil, able to support heavy loads, even when saturated. There is slight erosion hazard.

This site is in windbreak suitability group six. Acceptable species in this group are:

Tall Conifers

Austrian pine*
Douglas-fir**
Scotch pine*

blue spruce**
ponderosa pine
white fir**

Medium Conifers

eastern red-cedar
Rocky Mountain juniper

pinyon pine (*P. edulis*)

Tall Deciduous

bur oak
golden willow**
hackberry
plains cottonwood**

eastern cottonwood**
green ash*
narrow-leaved cottonwood**
Siberian elm

Medium Deciduous
Osage-orange*
Russian-olive

Russian mulberry*
Salt-cedar

Shrubs

American plum
antelope bitterbrush
Basin big sagebrush
fourwing saltbush
lilac*
Peking cottoneaster*
rubber rabbitbrush
caragana*
skunkbush sumac
western sandcherry*

Amur honeysuckle*
autumn-olive*
common chokecherry**
Hansen rose*
Nanking cherry*
red-osier dogwood**
Saskatoon Serviceberry**
silver buffaloberry*
Tatarian honeysuckle*
Woods rose*

- * Supplemental irrigation required (i.e., drip system).
(Weed barrier and drip systems cannot be simultaneously
cost-shared on the same planting.)
- ** Permanent water required (i.e., a permanent stream).
- *3 Black locust and honeylocust are on the list, but have
problems with locust borers (black locust) and sunscald
(honeylocust) and will not be cost-shared for those
reasons.

INVENTORY

Currently, the only woody vegetation on the property is a number of ornamental trees around the house. These are not placed correctly or in sufficient numbers to serve as an effective windbreak.

WILDLIFE

Rabbits currently use the site. With adequate nesting sites, mourning doves could make use of it. Deer occasionally visit the area. No threatened or endangered species have been seen in the vicinity. Meadow larks have been seen nearby.

A factor influencing local bird populations is the number of cats kept by adjacent neighbors.

RECOMMENDATIONS

1. Plant a plum thicket in the northwest corner of the property. This will occupy the area northwest of the pipeline and will require 272 trees on a four-by-four spacing. The thicket's primary purpose is to provide food and cover for wildlife,

but it will also serve as the windward row of a windbreak.

2. Plant a four-row windbreak along the north and west edges of the property (The plum row should be deleted next to the plum thicket.). This will require 171 plums (four-foot spacing), 136 pinyons (six-foot spacing) or 136 Rocky Mountain junipers (six-foot spacing) and 204 ponderosa pines (eight-foot spacing). The rows should be eight feet apart, wider if cultivating equipment is to be used for maintenance.

This will eventually be a four-row windbreak, consisting of a plum row, a row of either pinyon or Rocky Mountain juniper and two rows of ponderosa pine (The pinyon/juniper row may consist of both species, if desired.).

Six-foot width weed barrier is required (Five-foot width will be allowed to allow owner to use up existing supplies. All new weed barrier is to be six-foot width.).

Gaps in a windbreak are disastrous - the wind blows harder through the gap than it does on the open plain. Gaps wider than 1.5 times the specified spacing should be filled with trees at the next maintenance planting.

3. Lay weed barrier around existing trees. These should be 6'X6' squares. This will require 384 squares for 0.8 acres, at a rate of 480 trees per acre (the standard planting rate for block plantings). This will suppress grass competition, help the trees grow better and improve their appearance. This practice is optional at landowner's discretion.

COST-SHARE INFORMATION

Total farm area: 5.0 acres
Practice area: 0.8 acres (Windbreak)
0.8 acres (Aesthetic) (OPTIONAL)
0.1 acres (Wildlife Thicket)
Area benefitted: 4.6 acres
Practices:
SIP-1 (Planning)
Technical Code 30
SIP-4 (Windbreak)
Technical Code 380 (Farmstead Windbreak)
Technical Code 484 (Mulching)
SIP-8 (1/10 Acre Shrub Thicket)
Technical Code 645
SIP-9 (Aesthetic Quality Protection) (OPTIONAL)
Technical Code 24

Altogether, implementing this plan using Stewardship funds will commit you or your successors to maintain and protect it, at least through September 30, 2002 (or later, should you use all

three maintenance cost-shares).

Also, there are no long-term agreements under SIP. Each year's practice must compete with others being implemented at the same time. It is possible you will get cost-sharing for some phases of the work, but not others.

ANTICIPATED COSTS AND COST-SHARING

Practice	Total Cost	Cost-share	Net Cost
1992, 4.2 acres planned; 0.4 acres planted			
PLAN (SIP-1)	\$ 35.00	\$ 27.00	\$ 8.00
WINDBREAK (SIP-4) (Two rows, ponderosa pine)			
Trees	\$ 190.94		
Polymer	31.20		
Labor	<u>204.00</u>		
	\$ 426.14	\$180.00	\$ 246.14
MULCHING (SIP-4)			
Weed Barrier	\$ 408.00		
Labor	<u>204.00</u>		
	\$ 612.00	\$310.00	\$ 302.00

Note: The SIP-4 practice violates the \$1000.00/acre hold-down. The area is 0.4 acres. A maximum of \$400.00 will be paid, in spite of the figures above.

1993, 0.2 acres planted

WINDBREAK (SIP-4) (One row, pinyon or Rocky Mountain juniper)			
Trees	\$ 127.30		
Polymer	20.80		
Labor	<u>136.00</u>		
	\$ 284.10	\$ 90.00	\$ 194.10
MULCHING (SIP-4)			
Weed Barrier	\$ 272.00		
Labor	<u>136.00</u>		
	\$ 408.00	\$155.00	\$ 253.00

Note: The SIP-4 practice violates the \$1000.00/acre hold-down. The area is 0.2 acres. A maximum of \$200.00 will be paid, in spite of the figures above.

Note: In 1993, failed spots in the 1992 planting will need to be replaced. Anticipate the loss of about 30 seedlings. This replacement is eligible for cost-sharing (75% up to \$400.00).

1994, 0.2 acres planting; 0.1 acre wildlife

WINDBREAK (SIP-4) (One row, American plum)

Trees	\$ 65.80		
Polymer	26.00		
Labor	<u>171.00</u>		
	\$ 262.80	\$ 90.00	\$ 172.80

MULCHING (SIP-4)

Weed Barrier	\$ 228.00		
Labor	<u>171.00</u>		
	\$ 399.00	\$155.00	\$ 244.00

Note: The SIP-4 practice violates the \$1000.00/acre hold-down. The area is 0.2 acres. A maximum of \$200.00 will be paid, in spite of the figures above.

Note: In 1994, failed spots in the 1992 and 1993 plantings will need to be replaced. Anticipate the loss of about 10 seedlings from the 1992 planting and 45 seedlings from the 1993 planting. This replacement is eligible for cost-sharing (75% up to \$800.00).

WILDLIFE (SIP-8) (1/10-Acre Plum Thicket)

Trees	\$ 104.67		
Polymer	41.60		
Weed Barrier	242.00		
Labor	<u>272.00</u>		
	\$ 660.27	\$280.00	\$ 380.27

1995, 0.1 acre wildlife planting; 0.8 acres aesthetic improvement

AESTHETIC QUALITY IMPROVEMENT (SIP-9)

Weed Barrier	\$ 768.00	\$ 80.00	\$ 688.00
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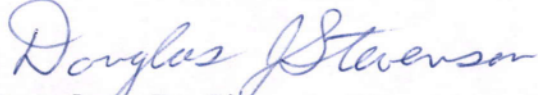
Failed spots:

In the fall following each planting, survival must be checked and failed spots replanted. Normal attrition is about 15% for most species (Plums tend to do better.). The plum thicket can tolerate 30% losses without having to be replanted if its leeward row has no gaps. Maintenance plantings are eligible for cost-sharing and may be cost-shared up to three times; however, there are no long-term agreements under SIP. If cost-sharing is not available, the maintenance must still be completed, at land-owner's expense.

Costs shown are estimates and based on 1992 prices. Actual costs may vary.

This plan is designed so that landowner may discontinue planting (except for maintenance) at any time and have a satisfactory conservation planting result. For this reason, LANDOWNER MAY DISCONTINUE NEW PLANTINGS (NOT MAINTENANCE PLANTINGS) AT ANY TIME AFTER JANUARY 1, 1993, WITHOUT PENALTY.

Respectfully Submitted By:

A handwritten signature in blue ink that reads "Douglas J. Stevenson". The signature is written in a cursive style with a large initial "D".

Douglas J. Stevenson
Colorado State Forest Service