



CITY OF RAPID CITY

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To: Mayor Sam Kooiker and City Council Members

From: Lon Van Deusen, Interim Parks and Recreation Director

Subject: Urban Interface Management Plan for Mountain Pine Beetle Suppression and Hazardous Fuels Removal

Date: September 19, 2012

Attached for your review and approval is the Rapid City Urban Interface Management Plan for Mountain Pine Beetle Suppression and Hazardous Fuels Removal, Elements of the Survivable Space Initiative, dated September 18, 2012.

The goal of the program is to advise Rapid City landowners, who live in the urban interface area, on the management of their property to create a safe and healthy forest. MPB infestations have devastated many areas and as a result created hazardous wildfire conditions. This project will encourage landowners to thin their forest to create a more survivable space around their home, which in turn will reduce the spread of MPB.

The Plan includes three forest management tools:

- MPB survey and associated cost share for tree removal
- Survivable Space assessments and associated hazardous fuel removal cost share, and
- Curb side branch chipping (in identified high-risk areas only)

Based on the cycle of life for the Mountain Pine Beetle, now is the time for staff to begin inspecting properties for trees that have become infested with beetles and recommend action to property owners. The Plan has been reviewed by the Urban Forestry Board and the Parks and Recreation Advisory Board; both entities recommended approval.

The Parks and Recreation Department requests that action be taken to approve the Management Plan. If you have any questions, please contact me.

Rapid City
Urban Interface Management Plan
Mountain Pine Beetle Suppression
Hazardous Fuels Removal
Elements of the
Survivable Space Initiative
September 18, 2012

The overall goal of this project is to advise Rapid City landowners, who live in the urban interface area, in the management of their property to create a safe and healthy forest. Mountain Pine Beetle infestations in the Ponderosa Pine forest have devastated many areas and as a result created hazardous wildfire conditions. This project will encourage landowners to thin their forest to create a more survivable space around their home which in turn will reduce the spread of Mountain Pine Beetle. This project will assist private landowners in Rapid City in identifying Mountain Pine Beetle infested trees, provide fire risk assessments and assist with management costs of the forest. This program is a coordinated effort promoting the Survivable Space Initiative's Hazardous Fuel Removal Program administered by the Rapid City Fire Department and the Mountain Pine Beetle Suppression Program administered by the Rapid City Parks and Recreation Department. Rapid City will work in conjunction with Federal, State and County agencies. This plan requires the support of numerous departments of the City of Rapid City.

This plan provides for a coordinated effort between Rapid City Fire and Rapid City Parks and Recreation to conduct an educational campaign aimed at informing landowners of the symptoms of Ponderosa Pine infested with Mountain Pine Beetle. The educational campaign would provide information to landowners of the wildfire risks present on their property and the management techniques used to reduce these risks. The plan provides a process for requesting hazardous fuel assessments, property surveys to identify Mountain Pine Beetle infested trees and the requirements of cost share funds available for all programs.

There are three forest management tools used in this plan.

1. Mountain Pine Beetle survey and associated cost share for removal
2. Survivable Space assessments and associated hazardous fuel removal cost share.
3. Curb side branch chipping. Service provided within the identified high risk fire area only.

(See Attachment 1)

Landowners within the urban interface will be notified via US mail explaining the programs available and the process for requesting hazardous fuel assessments, curb side brush chipping and survey of their property for Mountain Pine Beetle.

Participation in the free Mountain Pine Beetle survey is voluntary but required to receive cost share for removal of the infested trees. Landowners who do not request a Mountain Pine Beetle survey of their property will be required to remove Mountain Pine Beetle infested trees at their own expense. Properties which are identified as having Mountain Pine Beetle infested trees by voluntary survey, hazardous fuel assessment or other observation are subject to Municipal Code 12.40.105.

The accepted control method for Mountain Pine Beetle infested trees shall be the complete removal of the infested tree from the property. Disposal of the infested tree shall be in accordance with the procedures outlined in this plan. The Director of Parks and Recreation or the Urban Forester shall have the authority to negotiate other acceptable methods for destroying infested trees when conditions dictate an alternate method of destroying the infested tree.

The Urban Forester shall determine which properties shall receive the highest priority based on data collected from previous surveys. Priority will be given to areas with the greatest number of infested trees. The Urban Forester shall administer the survey requests and cost share for Mountain Pine Beetle coordinated with hazardous fuel assessments conducted by the Rapid City Fire Department.

Landowners who request enrollment in the Mountain Pine Beetle suppression program and hazardous fuels removal program shall qualify for cost share reimbursements. The reimbursements shall follow the guidelines established in this plan and consistent with the requirements of the hazardous fuels removal program.

Reimbursements for trees infested with Mountain Pine Beetle shall qualify for a per tree reimbursement. The cost share amount under this program shall be 50% of the average removal cost per tree established from data collected in the 2011-2012 suppression plan. The Mountain Pine Beetle suppression program shall provide a reimbursement in the amount of \$100.00 per tree. The Director of Parks and Recreation or the Urban Forester shall have the authority to authorize an alternate reimbursement amount and disposal methods. Alternate reimbursement will be authorized only when certain conditions exist. The geographic location of the tree makes the tree either abnormally expensive or abnormally difficult to remove. The Urban Forester shall make the determination if the landowner qualifies for alternate reimbursements. The alternate reimbursement is paid in the amount of \$20 per tree for felling and cutting the tree into 18 inch pieces.

The maximum reimbursement, per parcel of land for removal of Mountain Pine Beetle infested trees, shall be \$2000.00.

This plan grants authority to the Director of Parks and Recreation to use the provisions of this plan for enacting control measures aimed at other pests which may threaten the pine forest.

The Survivable Space Initiative provides for Hazardous fuel removal. Hazardous Fuel Removal shall be a part of the Urban Interface Mgmt Plan. This city program works in conjunction with a State of South Dakota matching grant payable to landowners to thin their private forest at a 50/50 percent cost share. A landowner may receive reimbursement from the City Hazardous Fuel Removal funding in the amount of 50% of the landowners net cost after State funding is applied. The maximum amount reimbursable under the hazardous fuels program from the Mountain Beetle funding shall be \$1000.00. (Example: Cost of fuel reduction project totals \$3500.00. 50% State of SD cost share = \$1750.00. 50% City of Rapid City cost share based on \$1750 = \$875. Landowner out of pocket expenses after grants is \$875.) The landowner may still qualify for the per tree cost share for identified Mountain Pine beetle infested trees.

The maximum total cost share for removal of Mountain Pine Beetle infested trees and hazardous fuel removal shall not exceed \$3000.00 per parcel.

Landowners requesting curb side chipping of hazardous fuels removed from their property shall contact the Rapid City Fire Department to ensure their property qualifies for this service. Landowner must attend an informational meeting or have a site visit by a RCFD WUI assessment specialist. Groups of landowners will be encouraged to participate in this program. This plan provides for a 90 day trial period beginning 30 days after adoption of this plan by the Rapid City Council. Landowners must live within the areas identified as high risk of wildfire defined as the primary WUI are eligible for the chipping program. Landowners will be responsible for cutting hazardous fuel material smaller than 5 inch diameter at the base of the stem. The trees must be placed at curb side with the base of the stem facing the street. The landowner must be approved for participation in the program from the Rapid City Fire Department prior to cutting trees and brush. Trees removed under the Mountain Pine Beetle suppression cost share program or hazardous fuels removal cost share program cannot be placed in the Curb Side Chipping program. It is the intent of this program to provide this service to landowners who remove these small diameter trees to reduce fire risk and create a healthier forest which is less susceptible to infestation by Mountain Pine Beetle and reduce the risks associated with wildfire. It is not a debris removal or landscape cleanup program. Trees cut by a contractor may not be included in the Curb Side Chipping program.

The cost share, for all programs, will be available on a first to apply for reimbursement basis and will end at such time as funds are no longer available or by action of the city council.

All landowners, owning property within the limits of Rapid City, will be eligible to have their property surveyed for Mountain Pine Beetle infested trees. Information regarding the programs available will be mailed to landowners who could potentially have Ponderosa Pine forest cover on their properties. Information will also be available on the City of Rapid City web site.

This plan becomes effective on the date adopted by the Rapid City Council and shall remain in effect until amended or replaced by action of the City Council. Landowners participating under the Hazardous Fuels Removal Program who have had their projected approved by Rapid City Fire prior to council approval shall qualify for the 75% of net cost reimbursement

Reimbursement Procedure for Mountain Pine Beetle Infested Trees

1. Landowners must call Parks and Recreation at 791-1675 or go online at www.rcgov.org and complete a request for survey of their property.
2. Property will be surveyed based on priorities established by the Urban Forester
3. Survey of the property completed by Parks and Recreation staff.
4. If the trees on the property are free of Mountain Pine Beetle infestation the property owner will be mailed a copy of the survey results.
5. Property owners with infested trees on their property will receive a copy of the survey results and a green Tree Removal / Disposal Permit indicating the amount of cost share available for the removal of the Mountain Pine Beetle infested trees. This permit shall expire 60 days from date of issue.
6. Cost share permit shall be endorsed by the Rapid City Landfill documenting proper disposal.
7. Cost share permit shall be signed by the contractor verifying removal, disposal and payment for services.
8. The landowner shall submit the signed copy of the permit and landfill scale ticket to the Parks and Recreation office requesting reimbursement for removal of the Mountain Pine Beetle infested trees. Reimbursement will be paid only for those trees identified in the survey. Reimbursement shall be \$100.00 per tree for complete removal. Alternate reimbursement shall be \$20 per tree.
9. Infested trees must be removed within 60 days from date of issue of removal /disposal permit.
10. Requests for reimbursement must be received within 60 days of the date of removal.
11. Maximum Reimbursement per parcel \$2000.00

Reimbursement Procedures for Hazardous Fuels Removal Cost Share Supplement

1. Landowner shall contact the Rapid City Fire Department at 394-5233 to request a Hazardous Fuels Assessment of their property.
2. The landowner shall obtain 3 quotes from a list of contractors provided by Rapid City Fire.
3. The landowner shall submit a South Dakota Department of Agriculture Request for Cost Share Assistance Form to Rapid City Fire.
4. Once the cost share assistance is approved the landowner shall hire a contractor to complete the project.
5. Upon project completion the landowner shall submit a SD Department of Agriculture Certification of Project Completion along with a contractors invoice reflecting bill has been paid in full.
6. Cost Share from City funds to landowners who submit a bid to perform their own work shall be eligible for a 25% cost share.
7. Reimbursement for hazardous fuels removal will be processed by Rapid City Fire.
8. Rapid City Fire will submit required documents to Rapid City Parks and Recreation for processing of the landowners net cost reimbursement. Maximum Reimbursement from city funds \$1000.

Attachment #1

HAZARDOUS FUEL REMOVAL CHIPPING PROGRAM

A commitment to critical removal of hazardous Fuel for wildfires

TARGET: To ensure the removal and continuous maintenance of ladder fuel that contributes to severe fire behavior in the Wildland Urban areas of Rapid City.

The heavily populated Wildland Urban Interface (WUI) areas in Rapid City are inundated with heavy ladder fuels under an overgrown forest canopy. *This area has over 200 million in home/property value in developments interspersed within the urban interface and are situated in a manner where slope, terrain, and fuel loading are all aligned for a catastrophic fire event. Individual landowners live in close proximity to one another and in the present state, multiple structure ignitions will quickly over tax resources.* These interface communities join one another and pose a significant threat to the surrounding Rapid City community at large.

All forms of fire protection are classified as either active or passive. **Active** fire protection is taking specific action to control the fire in some manner. **Passive** fire protection uses resistance to ignition or provides some form of warning that allows other action to be taken. Ignition resistant building materials are a good example of passive. Many may construe that reducing the amount of hazardous vegetation on homeowners property would fall into the passive category. Actually, actively altering the amount of fuel the fire has to burn directly affects how the fire will burn, which is *taking specific action to control the fire in some manner*. This type of active fire protection is what will undoubtedly have an effect on the level of destruction our communities will suffer when a wildland fire occurs.

Many cities across the Western United States have implemented brush chipping programs in conjunction with other grant programs designed to give education and assistance with hazardous fuel removal, such as our own ***Survivable Space Initiative***. Like others, Rapid City does have a yard waste program that allows homeowners to use free drop off sites at designated areas in the city. The issue with many residents in the WUI is how to get the target material to those sites. Normal yard waste such as grass clippings, leaves, plant material, and small branches and trimmings are not the focus of this program, and are not eligible. The larger woody brush, small pines, cedars, and junipers pose the greatest fire threat and are the source of angst for homeowners in the WUI areas of the city who do not have vehicles conducive of transporting this type of material. As a result, the highly flammable ladder fuel does not get removed, which contributes to the extreme fuel loading that currently exists in Rapid City. This program is one more tool that educates and assists residents to become fire resistant, and to *maintain* that fire resistance for years to come. Large tree thinning is effective for 15-20 years; ladder fuel must be maintained every 3-5 years in relation to reduced fire hazard.

The program in the first year would run for 12 weeks; 6 in the fall and 6 in the early spring. The schedule will increase depending upon interest to possibly year-round. Homeowners in predetermined geographical areas will be notified with an informational brochure. Program parameters: 1) Homeowner must be in the designated WUI of the city 2) Homeowners must either attend an informational meeting or request a property assessment, and request to be on the list of properties in their area on predetermined dates. 3) The brush eligible for chipping **must**; **a)** be smaller than 5" diameter at the base of the stem **b)** be hazardous fuel – small pines, cedar, juniper, & other **woody** brush material that is over grown on the property, and **c)** placed on the curb and piled neatly in one direction with the base of the stems facing the street. If the property is not on the schedule, if the brush is not piled correctly, or if the material left on the curb is not considered hazardous fuel (grass clippings, leaves, small trimmings, or other yard plants such as vines, flower stems, or otherwise small material) the truck will not stop and the homeowner must either reschedule or move the material themselves. Questions about property eligibility will be determined by the Fire Department program manager.

Attachment 1 Continued

FINANCIAL: Being a new program, existing equipment will be utilized to get the program started. The chipper and truck can be provided by the parks department for the pilot year. If dedicated equipment is needed due to increases in program participation then those requests will be made at that time. Two skilled labor seasonal employees starting at step 3 will be used due to the requirements associated with the work. The cost for wages will be \$16,430 for the 12 weeks. Preliminary estimates for equipment costs are approximately \$3910 for fuel, \$700 for maintenance. These costs are based on a full schedule for the equipment.

Status: Equipment is secured for the project and is in good working order. The Hazardous Fuel Reduction/ MPB Removal Team has given initial approval to include as part of the Urban Interface Management plan. Existing qualified seasonal city employees are available to fill both positions. Rapid City Fire Dept. has the development plan in place for the first year and is ready to implement.

Action: Approve the Hazardous Fuel Removal Chipping Program as part of RCFD *Survivable Space Initiative* and finalize the agreement parameters on including it in the Urban Interface Hazardous Fuel Removal/Mountain Pine Beetle Suppression plan.