

AGENDA ITEM SUMMARY

TO: Chairman and Members, Protective Services Committee

AND TO: Janis Bell, Chief Administrative Officer

FROM: Darron Campbell, Manager of Community Services DATE: May 31, 2006

DATE OF MEETING: June 9, 2006

SHORT SUMMARY: Community Wildfire Protection Plan for the Cariboo Regional District

VOTING: Corporate Vote – Unweighted

MEMORANDUM: The Regional District received approval in September 2005 for \$15,000 to complete a Community Wildfire Protection Plan (CWPP) for the Cariboo Chilcotin through a funding program administered by the Union of BC Municipalities (UBCM) and the Ministry of Forests. Because the funding program was designed more with municipal areas in mind, the structure represented challenges for regional governments with much larger jurisdictions to cover.

As a result, this phase one plan is broad in scope and many recommendations apply across all areas of the region. Work on several of the most critical, and achievable, recommendations such as increasing public awareness of the FireSmart program and safe property development strategies could begin immediately.

The phase one plan allowed for basic assessments of 26 rural communities. Of these assessments 12 were identified as priorities for further ‘community level’ planning and potential fuel management operations.

The second planning phase will include detailed assessments and fuel management prescriptions for the identified communities. Funding is available from UBCM for both the community-level planning and fuel management operations, however the projects must be delivered as a 75%-25% cost share with local governments. In-kind contributions are eligible to account for the local government share.

This regional plan will combine with the community-level wildfire planning underway lead by Quesnel, Williams Lake and 100 Mile House to ensure the entire region is covered. Planning for Wells has not yet been initiated under the CWPP program.

ATTACHMENT: CRD CWPP Executive Summary and table 4 Summary of Community Assessments

POLICY IMPLICATIONS: The CWPP is part of the ongoing development of the Regional District’s Electoral Area Emergency Response Program.

FINANCIAL IMPLICATIONS: Phase two community-level planning and operational fuel management will require 25% to be funded by the Regional District either as cash or in-kind. The total cost for the 12 community plans are estimated at \$150,000. Costs for

Reviewed by the Treasurer:

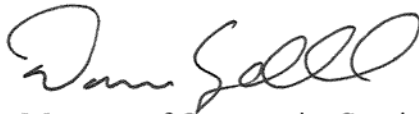
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operational fuel management will not be known until the community plan recommendations are complete. The Regional District portion must mainly be in-kind as staff resources allow due to the limited funds available from the Electoral Area Emergency Planning budget.

OPTIONS: Receipt; Receipt and endorsement of the recommendations; Rejection

RECOMMENDATION: That the agenda item summary from Darron Campbell, Manager of Community Services, dated May 30, 2006, regarding the Cariboo Regional District's Community Wildfire Protection Plan (CWPP) be received. Further that staff work towards implementing the regional wildfire protection actions recommended in the CWPP. And further that staff proceed with phase two, community-level planning as recommended in the CWPP with the recognition that the final funding application to UBCM for phase two must come before the Board for approval.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Darron Campbell", written in a cursive style.

Manager of Community Services

Cariboo Regional District Community Wildfire Protection Plan



May 2006

1 Acknowledgements

The Cariboo Regional District Community Wildfire Protection Plan was produced under contract by Mel Dunleavey of Mustang Wildfire Services. The following individuals provided helpful input and ideas to the author to address the potential for fire within their communities.

Graham Allison	Chair, 108 Greenbelt Commission
Duncan Barnett	Cariboo Regional District Director Area F
Chris Betuzzi	Ministry of Forests and Range, Cariboo Fire Centre
Alan Boyd	Green Lake Ratepayers Association
Alex Bracewell	Cariboo Regional district Director, Area J
Ray Bruniski	Big Lake Fire Department
Darron Campbell	Cariboo Regional District, Manager of Community Services
Wayne Charlton	Kersley Community Association
Ted and Bertha Christian	Charlotte Lake Land Leaseholders Association
Bruce Cranston	Acting Manager, West Chilcotin Forest Products
Chris Dukelow	Anahim Lake resident
Wayne Escott	Operator, Anahim Lake Airport
Bob Felker	Forest Grove Volunteer Fire Department
Hank Hackett	Deka Lake & District Ratepayers Association
Ian Henderson	108 Mile Volunteer Fire Department
Don Irwin	Nimpo Lake community resident
Mike King	President, Tatla Lake Rod and Gun Club
Elaine Lucas	Likely Fire Department
Jack Madsen	Owner, Anahim Lake Resort
Ken Marsh	Deka Lake & District Ratepayers Association
Richard McKay	Ministry of Forests and Range, Cariboo Fire Centre
Rick Mumford	Cariboo Regional District, Director Area K
Wayne Murray	Planner, West Chilcotin Forest Products
Carson Norward	Interlakes Volunteer Fire Department
Bob Pernoski	Deka Lake Volunteer Fire Department
Maureen Pinkney	Cariboo Regional District Director Area L
Al Richmond	Cariboo Regional District Director Area G
Neil Sukert	Horsefly Fire Department
Ron Thurston	Watch Lake / North Green Lake Volunteer Fire Department
Wayne Towler	Watch Lake / North Green Lake Volunteer Fire Department
Doug Townsend	Interlakes Volunteer Fire Department
Darren Wilkinson	Ministry of Forests and Range, Cariboo Fire Centre
Dick Wright	Anahim Lake resident

The authors of this plan are Mel Dunleavey, Mustang Wildfire Services; and Jane Perry, J. Perry Resource Communications. Special thanks go to Jiri Vosyka of the Cariboo Regional District for producing the plan's maps.

Funding and project management for the plan's development were provided by the Cariboo Regional District and the Union of BC Municipalities.

Permission is appreciated from the contributing agencies to the Williams Lake and Area Interface Fire Plan, as this plan is strongly based on it. As well, some ideas have been used from the early work for the Quesnel and Area Community Wildfire Protection Plan and are also acknowledged with appreciation.

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2 Executive Summary

The Cariboo Regional District Community Wildfire Protection Plan was developed in response to community concerns about the threats to public safety and property values from wildfires. The Union of BC Municipalities and the Cariboo Regional District supported the plan's development. The plan identifies areas of the Cariboo–Chilcotin region in the Central Interior of British Columbia considered at high risk for wildfires in the “interface”, the zone surrounding population centres, or communities, where housing is often mixed with forested and cleared areas. This plan is presented to assist residents, provincial and regional government, and land users to address and coordinate management activities in the interface. The plan has been developed for the Cariboo Regional District to:

1. Assess the interface fire risk for population centres throughout the regional district;
2. Recommend general actions to reduce the potential impacts of interface fires; and
3. Provide specific recommendations for communities.

This Community Wildfire Protection Plan applies to the entire Cariboo Regional District, except for: the City of Quesnel and the surrounding areas of Barlow Creek, Bouchie Lake, Kersley, Ten Mile / Moose Heights, Red Bluff and West Fraser for which a plan is currently being prepared; the area covered by the Williams Lake and Area Interface Fire Plan (completed in August, 2005); and the communities of 100 Mile House and Wells, which are expected to produce plans in 2006.

Fire is a natural part of all forest ecosystems within the Cariboo Regional District area. Before fire suppression programs, wildfires generally occurred frequently. Because of the successful fire suppression over many decades, the available forest fuels for wildfire have increased significantly and fires that do occur now can burn hotter and more extensively. The available forest fuels for combustion affect the fire's severity. In particular, the arrangement of trees, ground vegetation and combustible material determines how fire would move through the stand. Stand density, ladder fuels, crown closure, ground fuels, total tree volume and suspended dead fuels are factors that affect the fire's intensity.

Developing this plan involved assessing the 12 main communities, or population centres, of the Cariboo Regional District and assigning a point rating and hazard class for each using the Wildland Urban Interface Fire Hazard Assessment Process from the Ministry of Forests and Range. Points were assigned for each of 23 factors to provide a cumulative rating point total and overall rating for each area. The analysis enabled comparisons between communities and specific recommendations for each. The communities rated were 108 Mile Ranch, Alexis Creek, Anahim Lake, Big Lake, Deka Lake, Green/Watch Lake, Horsefly, Kersley, Likely, Lone Butte, Nimpo Lake and Tatla Lake.

Settlement patterns in the Cariboo and Chilcotin have created concentrated residential areas surrounded by scattered residences and properties or ranches. The forested setting of many rural subdivisions, individual homes and ranches is a desirable feature of their location, but it also presents the threat of wildfire with rapid spread through the dwelling areas. The areas of Big Creek, Bridge Lake, Canim Lake, Charlotte lake, Chilanko Forks, Forest Grove, Lac la Hache, McLeese Lake, Nazko, Nemiah Valley, Puntzi Lake, Riske Creek, Sheridan Lake and Tatlayoko Valley were viewed but not rated in this review. Local residents recognize these areas as communities, but the residential development is too widespread and cannot be managed as a community for the potential of a wildfire to cause damage to structures and property.

FireSmart principles have proven effective from the review of several interface fires over the years, both in Alberta and British Columbia. For the assessed communities, the measures outlined in the FireSmart program are reasonable and can be adopted fairly easily. Residents need to be fully aware of, and willing to implement, the FireSmart principles to reduce the potential impacts on their property. This will significantly reduce the potential for extensive loss of property values in the event of a destructive fire.

Reducing the impacts of fire in the interface requires a coordinated and dedicated effort by all individuals and agencies involved. The potential of a fire can only be addressed through the positive influence on

human behavior and the implementation of various activities. Therefore, successful implementation of the plan's recommendations requires that everyone recognize the potential of and Interface fire and the impacts of such a fire and work together to reduce them.

Recommendations for the individual residents, Cariboo Regional District, provincial government, utility companies and First Nations reserves are:

No.	Topic	Recommendation
1	FireSmart	Promote the FireSmart Home Owners Manual widely as a reference for best practices to reduce the potential impact of a wildfire on property and buildings.
2	Tree removal	Ensure that the timber mark application system is simple and easy to follow for residents wishing to remove trees from private property to meet FireSmart standards.
3	Forest fuel reduction	Ensure that all forest fuel reduction activities: <ul style="list-style-type: none"> • Are documented in an area-specific plan; • Include consultation with agencies or groups responsible for managing the land use values identified in this plan; • Comply with the Open Burning Smoke Control Regulation or an Airshed Management Plan if one exists; • Incorporate proper disposal methods; and • Retain habitat values for Species at Risk and consider special features.
4		The Cariboo Regional District should work with the ministries of Forests and Range, and Environment to establish locations where forest fuel debris can be deposited for safe burning when the air venting index is appropriate. As well, the Open Burning Smoke Control Regulation will have to be amended to allow for burning of waste debris when it has been removed from its place of origin.
5	Subdivision Approval	In the planning and development of new subdivisions, planners and developers should be required to: <ul style="list-style-type: none"> • Apply FireSmart standards; • Improve access for new subdivisions and cul-de-sacs according to Ministry of Transportation standards; • Develop alternate access/egress routes and reactivate existing roads, as required, for emergency purposes; and • Prepare a Community Wildfire Protection Plan for the subdivision.
6	Road right-of-way mowing	The Cariboo Regional District should encourage the Ministry of Transportation to mow grass more frequently along the highway and arterial road rights-of-way within communities and interface areas.
7	Development Permits	Establish a Development Permit Area policy for the identified interface areas to protect developments from hazardous conditions. Ensure compliance with Development Permit Areas by appropriate coverage of the Regional District's Building Inspection Service.
8	Subdivisions	Through the referral process from the Ministry of Transportation, Highways Department, the Cariboo Regional District should require that in the planning and development of new subdivisions, planners and developers be required to: <ul style="list-style-type: none"> • Apply FireSmart standards; • Improve access for new subdivisions and cul-de-sacs; • Develop alternate access/egress routes and reactivate existing roads, as required, for emergency purposes; and • Prepare a Community Wildfire Protection Plan for the subdivision.
9	Waste transfer stations and landfill sites	Implement the FireSmart principles relating to vegetation management strategies in the interface priority zones around each waste transfer station and landfill site to manage the fire hazard around them
10	Emergency	The Cariboo Regional District should develop a local emergency response plan

Cariboo Regional District Community Wildfire Protection Plan

	response	for each community within its geographic boundaries.
11	Volunteer fire departments	All volunteer fire departments should have the appropriate equipment for fighting wildfires.
12	Sprinkler protection units	Obtain and locate sprinkler protection units for five buildings in each of the communities of 100 Mile House, Williams Lake and Quesnel for quick initial deployment on an interface fire.
13	Utility companies	Existing utility company rights-of-way close to communities should be enhanced, where appropriate, to serve as a fuel break.
14	Reserve lands	Dovetail the efforts of First Nations and the Cariboo Regional District to manage fire hazard in specific areas.
15	Public communications	Initiate a process of informing area residents about FireSmart through a door-knocking campaign by structural fire department personnel, community associations or Ministry of Forests and Range seasonal fire crews.
16	School programs	The Union of British Columbia Municipalities should be encouraged by the Cariboo Regional District to develop an educational program on the FireSmart program for school children in grades 1 to 6.
17	Regional district communications	Regularly include a small message in all Cariboo Regional District mail-outs, newsletters and other printed materials on the importance and need for all property owners to implement the FireSmart principles on their property.

In addition, the plan includes a detailed overview of each assessed community, including the completed Wildland Urban Interface Fire Hazard Assessment Process form, and local recommendations.

3 Introduction

3.1 Purpose

This plan was developed in response to community concerns about the threats to public safety and property values from wildfires, particularly in response to the 2003 wildfires and the subsequent Filmon report in 2004. The Union of BC Municipalities and the Cariboo Regional District supported the plan's development.

As a regional government, the Cariboo Regional District functions independently of the provincial government. Incorporated in 1968, it consists of 12 electoral areas and the incorporated member municipalities of Quesnel, Williams Lake, 100 Mile House and Wells. The Cariboo Regional District covers over 80,000 square kilometres and delivers services to a population of approximately 65,000 residents, including fire protection, recreation, libraries, waste management and utility systems. The Cariboo Regional District's geographic area is shown in Figure 1.

The Cariboo Regional District Community Wildfire Protection Plan identifies areas of the Cariboo–Chilcotin region in the Central Interior of British Columbia considered at high risk for wildfires in the “interface”. The interface is regarded as the zone surrounding population centres, or communities, where housing is often mixed with forested and cleared areas. This plan is presented to assist residents, provincial and regional government, and land users to address and coordinate management activities in the interface. The plan has been developed for the Cariboo Regional District to:

1. Assess the interface fire risk for population centres throughout the regional district;
2. Recommend general actions to reduce the potential impacts of interface fires; and
3. Provide specific recommendations for communities.

Definitions of technical terms used in this plan are provided in Appendix A.

3.2 Process

Mel Dunleavey of Mustang Wildfire Services developed this Community Wildfire Protection Plan from December 2005 to March 2006. The process began with an initial map review of the Cariboo Regional District's geographic area to identify communities and, consequently, where a potential interface fire risk may exist. From this review, a list was prepared to confirm the areas proposed for assessment.

Mel then contacted the respective regional district Director for input and suggestions, and the names of key local individuals for discussing contributing factors of interface fire and potential actions. He met with these people in their community to discuss their input and suggestions. All contributors are identified at the front of this report in the Acknowledgements section.

Mel Dunleavey also evaluated the population centres of the Cariboo Regional District and assigned a point rating and hazard class for each using the Wildland Urban Interface Fire Hazard Assessment Process from the Ministry of Forests and Range (available on the Union of BC Municipalities website). Points were assigned for each of 23 factors to provide a cumulative rating point total and overall rating for each area. The factors are listed in Table 1 and described in more detail in Appendix B. The analysis enabled comparisons between communities for making recommendations and prioritizing action (Appendix C).

This report is the first phase of a three-phase process to manage the interface fire risk. The second phase will entail producing detailed Community Wildfire Protection Plans for the identified communities outlining details in all aspects of interface fire mitigation and fire suppression measures. The mitigation measures will include detailed prescriptions of any fuel modification projects that are proposed, as well as any other

Table 4. Summary of hazard class, point rating and recommendations for the assessed communities.

Hazard Class	Community	Point Rating	Recommendations
Extreme	Alexis Creek	99	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan. 2. Consider deeded land owned by government agencies and the community association as Crown land.
	Anahim Lake	94	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan.
	Tatla Lake	91	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan. 2. Implement FireSmart around the Tatla Lake School.
	Nimpo Lake	91	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan. 2. Develop existing access roads as fire guards.
	Lone Butte	89	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan. 2. Develop water standpipes for easier access to the water of Horse Lake to fill the fire department water tender.
High	Deka Lake	83	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan. 2. Develop a plan to upgrade the alternate access routes from Deka Lake to the windy mountain road and the old unnamed forestry road in the vicinity of Farquharson Road.
	Green and Watch Lakes	81	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan.
	Kersley	74	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan. 2. Complete the fuel modification project being carried out adjacent to the community.
	108 Mile Ranch	72	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan. 2. Continue with proposed treatments prescribed in the "Richardson" report of 1991. 3. Implement livestock grazing of the grasses for the entire length of the gas line right-of-way along the west side of the subdivision.
Moderate	Big Lake	65	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan. 2. Develop an alternate access/egress route for the Big Lake School and Community Hall.
	Likely	64	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan. 2. Formalize the existing fire department group.
Low	Horsefly	49	<ol style="list-style-type: none"> 1. Produce a detailed Community Wildfire Protection Plan.

7 Summary of Community Assessments

The population centres, or communities, assessed within the Cariboo Regional District using the Wildland Urban Interface Fire Hazard Assessment process are listed in Table 4 in decreasing order of hazard classes and point rating. (The maximum point rating that a community can attain is 169.) Their respective point rating and hazard class are shown with a summary of the specific recommendations for each community.