

ALBERTA WILDERNESS ASSOCIATION

"Defending Wild Alberta through Awareness and Action"

The Hon. Frank Oberle

Minister of Sustainable Resource Development #404 Legislature Building 10800 97 Avenue Edmonton, AB T5K 2B6 Sent by email: peace.river@assembly.ab.ca

Mr. Bruce Cartwright

Area Manager, Rocky Mountain House Office Sustainable Resource Development 2nd floor, Provincial Building 4919 - 51 Street Rocky Mountain House, AB T4T 1B3 Sent by email: Bruce.Cartwright@gov.ab.ca

March 5, 2012

Dear Minister Oberle and Mr. Cartwright,

Please consider this document the official input from Alberta Wilderness Association (AWA) into the Forest Management Agreement (FMA) renewal process of Sundre Forest Products Inc. (SFP), within the provincial Forest Management Unit R10. Although we are aware there is no requirement to conduct a formal public consultation process surrounding FMA renewals, we believe Albertans have the right to provide input into the management of public lands held in trust and managed by our elected representatives. We strongly encourage you to begin a process by which Alberta Sustainable Resource Development (SRD) will receive and solicit the public's input on the renewal of this FMA.

Since its inception, AWA has been committed to ensuring healthy and intact forest ecosystems that will sustain biological diversity and viable wildlife populations, provide clean drinking water, and promote long-term sustainable economic opportunities for generations to come. AWA supports responsible ecosystem-based forest management practices that do not compromise healthy watersheds, wildlife habitat or the immeasurable wilderness values of forest ecosystems. Albertans have made it clear that current forest management practices that prioritize sustained timber yields above all other

non-timber forest values are no longer acceptable. The public's reaction to planned logging in the southern eastern slopes has made it clear there is a strong need to develop new and innovative policies and frameworks governing provincial land management that reflect the priorities of Albertans.

In summary, AWA requests these key points be integrated into Sundre Forest Products Inc. renewed Forest Management Agreement:

- an ecosystem-based management approach that prioritizes watershed health and ecological needs, and that manages other uses such as sustainable forestry and sustainable recreation within this overall priority
- the renewed FMA is managed to achieve FSC certification as a minimum
- the renewed FMA includes greater protection of known High Conservation Value Forests
- the FMA holder should commit to principles of re-forestation to ensure flood protection
- access and sediment risks must be reduced in fish-bearing streams; in particular, AWA strongly
 recommends that SRD work with federal Fisheries and Oceans, Alberta Solicitor General and
 Public Security and SFP to promptly phase out forestry and OHV activity impacting bull trout
 in the critical Fall Creek spawning area, with all associated roads decommissioned to prevent
 damage currently being inflicted by motorized recreation
- wetlands, springs and important groundwater recharge areas are protected
- linear disturbance in grizzly bear habitat is reduced to at least meet levels recommended in the provincial Grizzly Bear Recovery Plan
- the FMA include a commitment to maintain biodiversity in any fire or mountain pine beetle management approach
- industrial logging is deferred in Environmentally Significant Areas, and instead forest management practices that mimic natural disturbance patterns are implemented
- sustainable recreation should be encouraged, while working to reduce overall linear disturbance

Background

AWA is the oldest wilderness conservation group in Alberta, dedicated to the completion of a protected areas network and the conservation of wilderness throughout the province (Figure 1). We have over 7,000 members and supporters throughout Alberta, including members who reside near

SFP's FMA and who recreate throughout the FMA and adjacent areas. As such, we hold the important responsibility of representing the interests of many Albertans. The forests of Alberta's Eastern Slopes are a vital provincial resource. They provide clean water for communities across Alberta, Saskatchewan and Manitoba, diverse recreation opportunities for Alberta's burgeoning population, and habitat for a wide range of wildlife species. We have been actively involved in forestry practices across the public lands of Alberta's Eastern Slopes since the 1970's. Currently, the forests in Alberta are managed principally to provide a sustained yield of timber for the forestry industry. Other functions of healthy forests are managed as secondary concerns despite important policy documents, such as the Eastern Slopes Policy of 1984, that affirm the need to manage forests primarily for values besides timber harvest.

AWA also has a longstanding interest in the Bighorn Wildland, a large and fairly intact wilderness area that has largely retained its ecological integrity due to the absence of roads and industrial access. The Bighorn Wildland is located directly east of Banff and Jasper National Parks and west of Highway 734. The western edge of the SFP FMA falls within the Bighorn Wildland, as well as occupies the strip of land directly east of this important wilderness region (Figure 2). This area contains the headwaters of several important rivers, including the North Saskatchewan, North & South Ram, Clearwater, Brazeau and Red Deer Rivers, irreplaceable habitat for grizzlies and many other wildlife and plant species, areas of cultural significance dating back 10,000 years, and vast low-impact recreational opportunities. The Bighorn Wildland and surrounding transition zone contains zones of prime protection and critical wildlife habitat according to the integrated resource planning (IRP) zones outlined in the Eastern Slopes Policy, as well as provincially and nationally identified Environmentally Significant Areas (ESAs). AWA does not support logging within the Bighorn Wildland; we strongly believe that the exceptional ecological attributes of the Bighorn can be best maintained through natural ecosystem processes.



Figure 1. *Wild Alberta* map, showing Alberta Wilderness Association's Areas of Concern within the gold coloured areas.

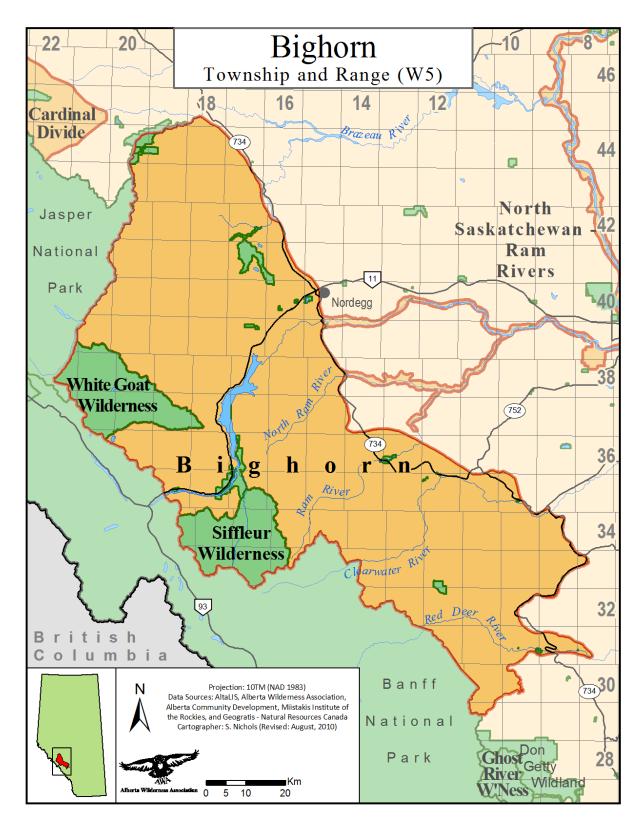


Figure 2. Map displaying the Bighorn Wildland (in gold), as defined by AWA's Wild Alberta map.

Public Lands

Public lands are held in trust for Albertans by elected representatives, and must be managed in the best interest of all Albertans. AWA believes this can be best achieved by preserving native ecosystems and protecting endangered species for the benefit of both present and future generations. All public land should be managed according to an ecosystem-based management model that primarily prioritizes ecological needs, with other uses managed as secondary. AWA has consistently insisted that a provincial public lands policy be developed through an open and transparent public process. As the FMA held by SFP falls on public land, decisions made upon that land will affect all Albertans. AWA strongly believes that decisions made regarding the use and management of these lands should involve a consultation process, in which all stakeholders are provided with accessible and relevant information and given appropriate avenues to participate in management decisions.

Sustainable Forestry Practices

In October 2011 AWA, alongside representatives from community groups, business owners and landowners from across the southern Eastern Slopes, compiled a report titled *Sustainable Forests*, *Sustainable Communities: the Future of Alberta's Southwestern Forests*. Though this particular initiative stemmed from widespread community opposition to logging practices within Alberta's southern Eastern Slopes, the concerns and priorities can be applied across the forests of the central and northern Eastern Slopes as well. Signatories and contributors to this report are not opposed to all logging, but feel there is an urgent need to develop a stronger ecosystem-based model of forest management that is guided by independent scientific expertise and augmented by local community participation and benefit. This ecosystem based management model would abide by the following overarching principles:

Principles of Sustainable Forest Management

The first priority of forest management in the forests of Alberta's Eastern Slopes will be the conservation of the ecological values and services of the forest, including provision of clean, abundant water, diverse forest ecosystems, wildlife habitat and carbon capture and storage. Diverse forest ecosystems include High Conservation Value forests, old growth forests, natural age structures, natural edge structure, habitat connectivity, critical wildlife habitat and watercourses.

- The second priority will be appropriate human use of the same forested landscape, including appropriate recreation and tourism, and sustainable forestry.
- Government agencies, in order to serve the public, will better integrate forest, wildlife, watershed and recreation management with clear objectives, monitoring, and transparency. Ministries responsible for forests, water, wildlife and recreation must be better integrated.
- Public consultation processes will be accessible, accountable and transparent.
- Forest management must be based on the best available, peer-reviewed science. When there is a
 risk of negative impacts or lack of scientific certainty, the precautionary principle must prevail.
 Management practices must assist recovery of species of concern such as grizzly bears and
 native fish.
- Logging, re-planting and reclamation will mimic and foster natural ecosystem functions.
- To the best extent possible, existing roads and infrastructure will be used. If not in regular use for over two months, roads must be deactivated and, where possible, reclaimed.
- Off-Highway Vehicles (OHVs) will be allowed only where there is a sustainable trail system that does not interfere with ecological values of the forest. If a trail is abused or overused, the trail must be closed until damage is repaired. Enforcement of motorized access will be greatly increased. Management of motorized recreational use will be the joint responsibility of Solicitor General and Public Security, SRD, and forestry companies operating in the area.
- Forest management practices will produce local benefits, and be informed by local input.
- Forest management will result in practices that adapt to the effects of climate change, such as changing distribution of tree species due to changing climatic conditions.

AWA believes that SRD and SFP must incorporate the above principles into the renewed FMA. Furthermore, the public needs evidence that the important factors outlined below have been considered and addressed by SRD before another agreement is approved that will govern the management of valuable public lands for the next twenty years.

Forest Stewardship Council Certification

The world market for forest products is changing rapidly as more and more consumers demand wood products from producers that have independent certification verifying ecological forest

management that ensures the forest structures and patterns characteristic of the natural system have been maintained. Forest Stewardship Council (FSC) certification promotes environmentally appropriate, socially beneficial, and economically viable management of the world's forests. Although other certifications exist in Canada, such as the Canadian Standards Association's Sustainable Forest Management (CSA-SFM) and the Sustainable Forestry Initiative (SFI), FSC certification is the only demonstrably independent system with broad international support from indigenous people and other forest users, industry, retailers, and conservation groups. FSC standards recognize that ecologically managed forests preserve biodiversity, mitigate climate, store freshwater, and support communities. AWA requests that SFP manage the FMA to achieve such certification.

High Conservation Value Forests

High Conservation Value Forests (HCVF) are those forests with outstanding or critical biological, environmental or social values. HCVF comprise the crucial forest areas and values that need to be maintained or enhanced in a landscape. A large proportion of this submission incorporates the mapping work performed by the Conservation Biology Institute, presented in the 2007 paper *Mapping High Conservation Value and Endangered Forests in the Alberta Foothills Using Spatially Explicit Decision Support Tools* (Strittholt, *et al*, 2007). The assessment area of this study included only the Western Alberta Uplands Ecoregion (referred to as the "Alberta Foothills" natural region). The area directly west of this ecoregion also contains forests of high conservation value; however these areas were not assessed as part of this particular report. AWA requests that the renewed SFP FMA improves Foothills conservation, and incorporates the following key conclusions from the above mentioned study:

- Only 1.2 percent of the Alberta Foothills natural region is currently protected. The recommended target to prevent numerous species extirpations and significant loss in overall ecological integrity should be approximately 16 percent of the ecoregion.
- Approximately 75 percent of the natural variability present in the Alberta Foothills is not adequately represented in a network of protected areas.
- The Alberta Foothills no longer possesses large intact forest landscapes (undisturbed blocks >50,000 ha), but approximately 1/3 of the region is comprised of smaller forest remnants (over 2,100 with mean size of 1,500 ha) which forms the natural backbone of the region and forms

one of the major building blocks for protecting the many ecological values identified in the region.

• Special management should be used in areas outside the protected areas network, as an expanded protected areas network alone will not be enough to maintain the conservation values present in the region today. (Strittholt, *et al*, 2007)

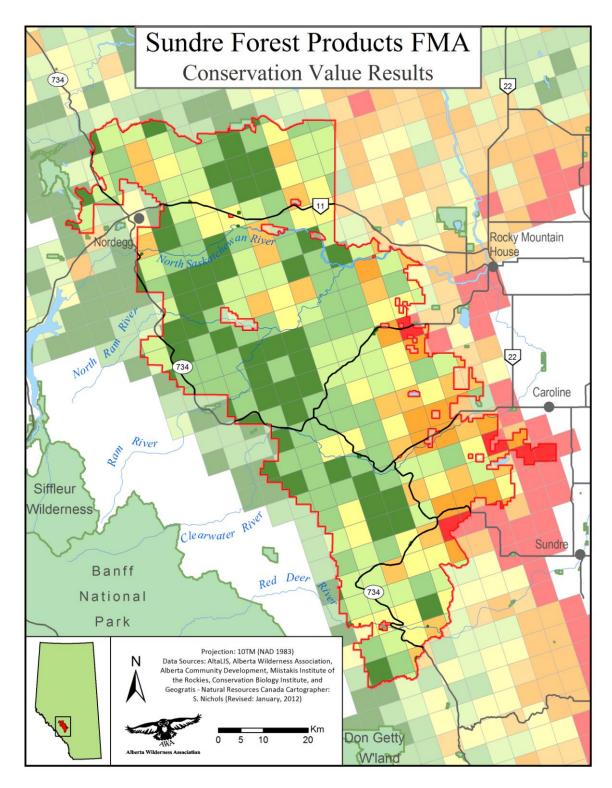


Figure 3. Map displaying areas of high conservation value within the SFP FMA. Dark green denotes areas of very high conservation value and red denotes areas of very low conservation value. (Data source: Strittholt *et al*, 2007) **Note**: The areas that appear in white were not part of the Alberta Foothills ecoregion thus were not included in Strittholt's study, although these areas also contain forests of high conservation value.

Watershed Health

The Eastern Slopes of Alberta contain the invaluable headwaters of rivers that provide fresh water to Alberta, Saskatchewan, and Manitoba. Healthy, intact forest ecosystems are integral to sustaining water quantity and quality, particularly our forested headwaters. Forests perform a vast range of ecological services through their ability to intercept, hold, filter, and slowly release pure water to Alberta's upper watersheds. The entire forest ecosystem contributes to the effective functioning of this natural sponge; forest soils with their deep layers of moss, lichen, and organic matter absorb and hold water, while trees themselves store large amounts of water in their roots. Some of the ecological services provided by intact forested landscapes include water filtration and purification, waste disposal and detoxification, habitat for plants and animals, production of fish, flood control, recreation, tourism, and aesthetic appreciation. Such services are costly and even impossible to replace when forest ecosystems are degraded or lost. By removing or damaging these essential elements, as through clearcut logging, the landscape's ability to filter, store and slowly release water is compromised.

AWA recognizes that the FMA held by SFP is already being operated under guidelines for water course management, but the cumulative effects of logging in the headwaters are not being addressed. Downstream communities are very concerned about flooding risk because of historic overharvesting in the headwaters. AWA requests that the FMA commit to principles of re-forestation to address flood protection. In addition, AWA requests that the FMA commit to reduce access and sediment risks for important fish-bearing streams (see also 'Native Fish Value' section below), and that wetlands, springs and important groundwater recharge areas in the FMA are protected.

Grizzly Habitat Value

Management of grizzly bears on provincial lands is directed by Alberta's *Wildlife Act*, as well as by the Alberta *Grizzly Bear Recovery Plan*. The Recovery Plan clearly states that: "Human use of access (specifically, motorized vehicle routes) is one of the primary threats to grizzly bear persistence" (2008). The underlying cause of Alberta's low grizzly bear population is habitat disturbance. Alberta's mountains and foothills are traversed by a huge network of industrial access roads, which allow increased human access into grizzly habitat. Of 172 reported human-caused grizzly mortalities on provincial lands, 89% were within 500m of a road (Benn, 1998). In the fall, grizzly bears need to feed

extensively to build up fat reserves needed to last them through the winter, and grizzly bears are notoriously sensitive to disturbance. Disturbances reduce the efficiency of feeding and may have an impact on the winter survival rate of hibernating bears. In addition, human access can be blamed for grizzly deaths due to illegal hunters, motor vehicle accidents, and bears that are inadvertently killed as a result of human-bear encounters. The Recovery Plan recommends that open route densities (linear access densities) be less than 0.6 km/km² in high quality habitat and 1.2 km/km² in all remaining grizzly bear range. The Recovery Plan also states that all resource roads not in regular use should be deactivated within two months of last use, and that roads no longer in use should be reclaimed within one year of last use (AGBRT, 2008).

SFP's 2008 Forest Management Plan Amendment (Mountain Pine Beetle Strategy Plan, Forest Management Unit R10 Approval Decision) notes: "[Alberta's Grizzly Bear Recovery Plan] recognizes that reduced grizzly bear survival and reproductive success is linked to human activity in priority habitats. Access development increases their activity. The [Sustainable Resource Development] department is developing an implementation plan for the GBRP in the near term. When this is published the Company shall address these requirements in its operational plans." The fact that, four years in, SRD has failed to publish an implementation plan for its Grizzly Bear Recovery Plan does not exempt SFP from enacting the recovery actions recommended in the plan.

Within the last year, two separate studies have calculated linear access densities within southern Alberta grizzly habitat (i.e., roads, trails, cutlines, etc., accessible to OHVs). Both studies independently concluded that densities within the study areas were much higher than the thresholds recommended for grizzly bear recovery. A study conducted by Global Forest Watch Canada revealed that in the Castle Forest Land Use Zone (FLUZ), identified as core grizzly habitat, linear access densities were double and sometimes triple the threshold of 0.6 km/km² (Lee and Hanneman, 2011). The Ghost Watershed Alliance commissioned a similar report assessing cumulative impacts upon the Ghost River watershed, part of which included assessing linear access densities within the Ghost River FLUZ. This area is classified as secondary grizzly habitat within the Recovery Plan, thus linear access densities should be less than 1.2 km/km². The average actual density within the study area was 5 km/km² (Yarmoloy and Stelfox, 2011). Based on these studies and in the absence of density assessments for the SFP FMA, AWA is very concerned that linear access densities in the FMA exceed thresholds necessary to sustain and recover grizzly populations. We are also concerned that SFP's

2007 *Mountain Pine Beetle Action Plan* projected a significant increase in grizzly mortality risk in many areas of the FMA in the first years of the plan, particularly if road access was not strictly enforced. Linear access densities within the FMA should be calculated and made publicly available. Linear access densities must be reduced wherever they are already greater than those recommended in the Recovery Plan.

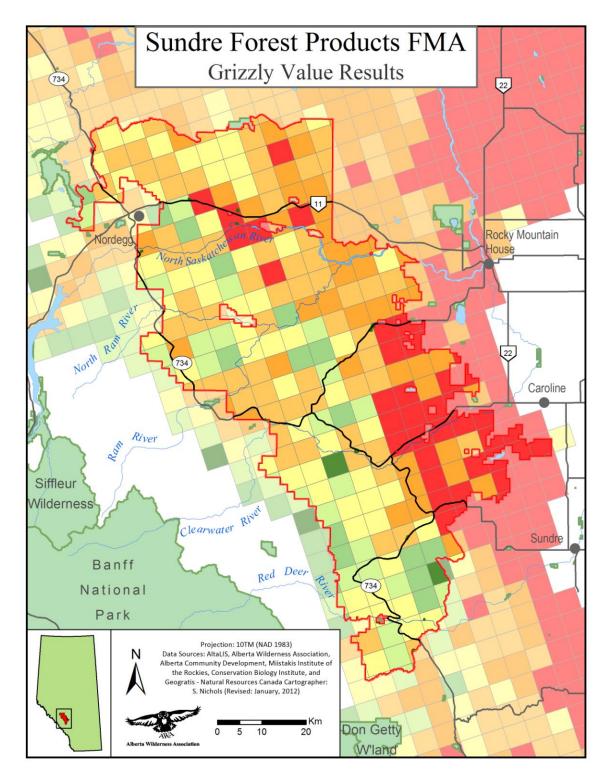


Figure 4. Map displaying areas of grizzly bear value, a combination of grizzly bear habitat value and grizzly bear habitat security. Dark green denotes areas of very high value and red denotes areas of very low value. (Data source: Strittholt *et al*, 2007) **Note**: The areas that appear in white were not part of the Alberta Foothills ecoregion thus were not included in Strittholt's study.

Native Fish Value

Throughout Alberta populations of bull trout (*Salvelinus confluentus*), our provincial fish, have declined significantly and the bull trout has now been classified as being "At Risk" or at "High Risk" of extirpation throughout its range. Historically, bull trout could be found in all the drainages of the Eastern Slopes, but significant population declines have been attributed to human impacts on fish populations and their habitat (Rodtka, Judd and Fitzsimmons, 2010). Bull trout choose streams with stable channels and flows, low proportions of fine sediment, available cover, and suitable water temperatures. Logging can negatively impact populations in numerous ways; it can result in faster runoff events and flooding, cause changes in groundwater recharge and alter seasonal flows. "Road building, watercourse crossing and land clearing activities associated with forestry and petroleum sectors can all lead to increased sedimentation which in turn can reduce survival of incubating Bull Trout eggs" (Rodtka *et al.*, 2010).

In addition, road building associated with forestry activity provides access to remote streams for OHV and other recreational uses, which exacerbates sedimentation and stream bank stability issues. Sediment accumulation will reduce habitat complexity and carrying capacity of a stream. A study in the Kakwa River watershed showed that bull trout abundance and distribution was negatively related to two metrics representing forest harvesting activity: percent sub-watershed disturbance and road density. It was also found that occurrence of bull trout was inversely related to subbasin road density. This study predicted that forest harvesting will result in bull trout extirpation in 24% to 43% of stream reaches that currently support bull trout in the Kakwa River Basin (Ripley, Scrimgeour and Boyce, 2005).

A study of bull trout spawning on reaches of both the North Saskatchewan and Ram Rivers within the SFP FMA indicated a higher than expected spawning site fidelity (Rodtka *et al.*, 2010). Bull trout have very specific spawning requirements, thus areas that are known bull trout spawning grounds are especially important in ensuring bull trout success and impacts to these areas must be avoided. In the North Saskatchewan River drainage, Fall Creek was confirmed as a key spawning and rearing stream for bull trout. The study concludes that bull trout are less abundant and more restricted in distribution than previously assumed, and the authors of this report conclude: "It is clear that the opportunity for future negative impacts is considerable and continued monitoring of the bull trout population is advised" (Rodtka *et al.*, 2010). AWA is extremely concerned that current land uses in Fall Creek are extremely harmful to the "At-risk" bull trout. According to Rodtka, *et al.*: "The Fall Creek Trail follows the stream valley for much of its length, crossing or travelling along the streambed repeatedly, including eight crossings in the area most frequented by spawning Bull Trout. During fieldwork, evidence of OHV use upstream was observed in the form of visible silt plumes. As well, we found evidence of OHV's being driven over redds. Adult fish also appeared vulnerable. Spawning often occurred at or near trail crossings and these large fish were conspicuous in the relatively shallow waters where they congregated" (2010). Based on these strong conclusions, AWA urges SRD to work with federal Fisheries and Oceans, Alberta Solicitor General and Public Security, and SFP to promptly phase out forestry and OHV activity that is impacting bull trout in the Fall Creek area, with all associated roads decommissioned to prevent damage inflicted by motorized recreation. The new Public Lands Act regulations contain provisions that enable SRD conservation officers to implement and enforce trail closures. There is sufficient evidence that these provisions should be applied to greatly reduce access in the Fall Creek area in order to ensure important fish habitat is adequately protected.

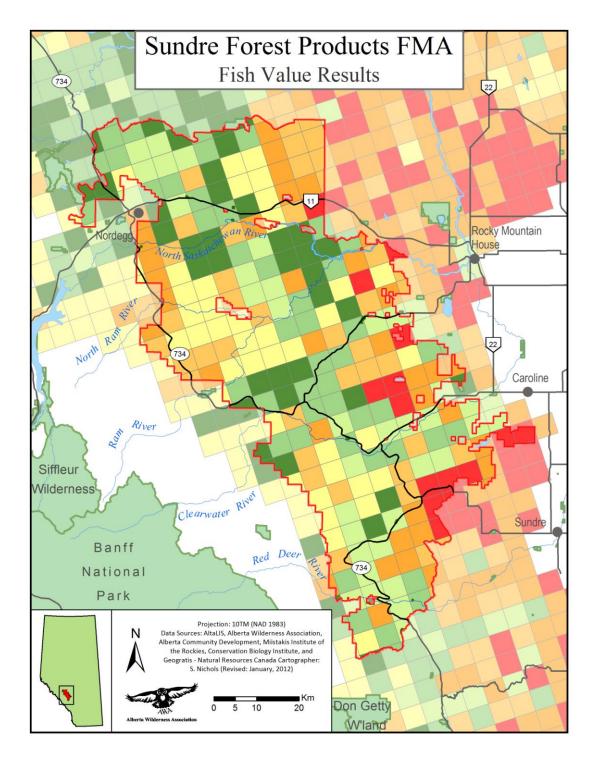


Figure 5. Map displaying areas of high fish value, a combination of watershed quality and species occurrence of bull trout and arctic grayling. Dark green denotes areas of very high value and red denotes areas of very low value. (Data source: Strittholt et al, 2007) **Note**: recent bull trout inventory research (Rodtka *et al.*,2010) should also be considered in conjunction with the above fish value habitat map. The areas that appear in white were not part of the Alberta Foothills ecoregion thus were not included in Strittholt's study

Roads, Access and Recreation

The tourism and recreational value of intact wilderness areas provides vast economic benefits to Albertans. AWA supports the use of wilderness areas for low-impact recreational activities, such as hiking, canoeing, wildlife viewing, photography and camping. Poorly managed recreational activities, such as uncontrolled OHV use, can have extremely detrimental impacts upon the landscape. When not confined to hardened trails with proper watercourse crossings, OHV activity can unnecessarily impact watershed health by causing erosion, siltation, loss of fish habitat, and destruction of wetland ecosystems. The proliferation of resource roads, seismic lines, cutlines, etc., has resulted in excessive linear access densities throughout Alberta and provided OHV users access to previously inaccessible, and inappropriate areas. Without properly constructed watercourse crossings, OHV activity can increase bank erosion and stream sedimentation, alter drainage patterns, and destroy fish habitat, particularly spawning grounds. Conversely, quality trails that support various recreational pursuits that avoid sensitive areas should be developed and maintained to attract visitors to the area, particularly in potential recreation hubs, such as the Nordegg area.

To better manage and reduce linear access density throughout the SFP FMA area, it is important that resource roads no longer in regular use are deactivated within two months of last use and reclaimed within one year of last use. Enforcement of illegal trail use is now the responsibility of conservation officers newly re-assigned to the Solicitor General department. Additionally, it is important for each land manager to take responsibility to control illegal access by means of linear disturbance associated with all development. To minimize linear access density and habitat fragmentation, integrated road planning between individual resource managers operating in any one region should be mandatory. Managing public access across the landscape, ensuring hardened, properly maintained networks of OHV trails, excluding inappropriate OHV-access, especially in critical wildlife and prime protection zones, and cooperatively developing road networks between multiple industrial users is central to safeguarding our watersheds.

We are currently witnessing a tremendous public outcry in both the Castle and Bragg Creek regions in response to proposed forest harvesting in these areas, which both support popular recreation sites. The West Bragg trail network is frequently used by hikers and cross-country skiers from the area, and from Calgary. In response to harvest plans of Spray Lakes Sawmills to log adjacent to the West Bragg trail network in the summer of 2012 without adequate public consultation, the Bragg Creek

community has already organized active lobbying networks. Harvesting in the Castle Special Place has provoked thousands of letters and phone calls to the Premier's office, rallies, and a great deal of media attention. In order to avoid a similar public outcry from recreational users and concerned citizens regarding SFP harvest plans, we recommend both SFP and SRD carefully consider the needs of all users, and ensure expansion of low-impact recreation and tourism industries are not hindered by future harvesting plans.

Natural Forest Disturbance Regimes

Industrial scale clearcut logging practices substantially alter a forest ecosystem beyond the normal disturbance range of changes that would occur through forest fire or insects. Clearcut logging introduces alien weeds along logging roads, lowers among-stand biodiversity, and increases edge effects detrimental to forest ecosystems.

Research conducted in the Kananaskis watershed has shown that forests of all ages burn with equal probability (Johnson and Larsen, 1991). These findings dispute the common claim of government and forest managers that older forests are more susceptible to large-scale forest fires, and that clearcut logging of dense stands of old growth must occur to protect nearby communities from the threat of forest fires. In a subsequent study conducted in the southern Canadian Rocky Mountains, researchers concluded that forests of various successional growth stages present equivalent fire risks as mature forests, and that both fire intensity and fire initiation were strongly related to weather components. They concluded that forest fire behaviour is determined primarily by regional and temporal weather variations, rather than forest stand age (Bessie and Johnson, 1995). Research within the boreal mixedwood forest indicates that the probability of fire initiation is higher in recently harvested areas due to a variety of factors, including an increase in fine fuel load, slash and other logging debris that is prone to lightning fire initiation. In addition, it was found that lightning fire initiation is increased along linear features such as roads, cut lines, etc, that have been re-vegetated by native and non-native grasses (Krawchuk and Cumming, 2009). As the above mentioned research concerns forests in the southern Eastern Slopes and boreal mixedwood region, respectively, we are interested in whether either SFP or SRD has conducted similar studies concerning forest stands within the SFP FMA, or what studies have been conducted to inform the Fire Smart programs currently practiced in these forests?

Research has also disproved claims that forests must be logged to stop the spread of mountain pine beetle (MPB). Based on the MPB experience in British Columbia, the harsh winters and small diameters of trees within Alberta's Eastern Slopes will result in low beetle fecundity, and a relatively slow spread of MPB populations (Safranyik and Carroll, 2006). There is even some suggestion that clearcut logging may accelerate the geographic spread of MPB by forcing beetles to disperse farther to find an adequate food source. In addition, alternative methods of managing MPB outbreaks have been used effectively (Carroll, Shore, Safranyik, 2006). In Banff National Park where clearcut logging is not permitted, intensive on the ground surveying is used to detect infected trees which are then selectively removed. Not all trees in an infected forest stand will be killed by MPB, thus we will lose more trees by removing large clearcuts of infected forests than due to beetle attacks alone. There are examples here in Alberta of forests that have "survived" beetle attacks, such as in Waterton National Park in the 1970s. In these forests, MPB removed some of the older trees which, due to density-dependent growth, allowed younger trees to grow to replace them. This pattern of disturbance therefore resulted in the attacked forests regaining normal forest composition much more quickly than that following a clearcut (Parks Canada). As well, there is no current evidence in support of increased fire incident in stands depleted by MPB (Shore, Safranyik, Hawkes and Taylor, 2006). AWA requests that the FMA include a commitment to maintain biodiversity in any fire or MPB management approach.

Environmentally Significant Areas and Protected Areas

As designated by the Alberta government in 1997/1998 and updated in 2009, the SFP FMA contains Environmentally Significant Areas (ESAs) of both national and provincial significance. ESAs identify areas that contain rare or unique elements that are important to the long-term maintenance of biological diversity, soil, water, and other natural processes. "ESAs are important, useful, and often sensitive features of the landscape. As an integral component of sustainable development strategies, they provide long-term benefits to our society by maintaining ecological processes and by providing useful products. The identification and management of ESAs is a valuable addition to the traditional socio-economic factors which have largely determined land use planning in the past" (Alberta Environmental Protection, 1997).

The areas outlined in gold on the map below have been recognized as ESAs of "national significance" within the FMA: much of the Nordegg River sub-watershed; the North Saskatchewan

River mainstem riparian area including the Shunda Area water gaps; the South Ram River riparian area and several kilometers downstream of the North-South Ram Rivers confluence; a large area of the Clearwater sub-watershed west of the Forestry Trunk Road, and several square kilometers east of the Trunk Road; the Red Deer River mainstem riparian area; and lands on the west side of the FMA in the James River and Red Deer River sub-watersheds.

The areas outlined in blue are considered "provincially significant," including: a 60.6 km² large natural area on either side of Hwy 752, a 62.4 km² large natural area south of the North Saskatchewan River mainstem; and a 17.1 km² area, about 15 km west of Rocky Mountain House, containing a spring with a rare aquatic invertebrate.

In order to preserve the ecological integrity of this region, and protect important wildlife habitat and river corridors, AWA requests that industrial logging be deferred in these areas and that management follow natural disturbance patterns. The areas described in the preceding paragraphs and shown on the map below highlight ecological values that must be considered in all land use plans, such as the renewed SFP FMA.

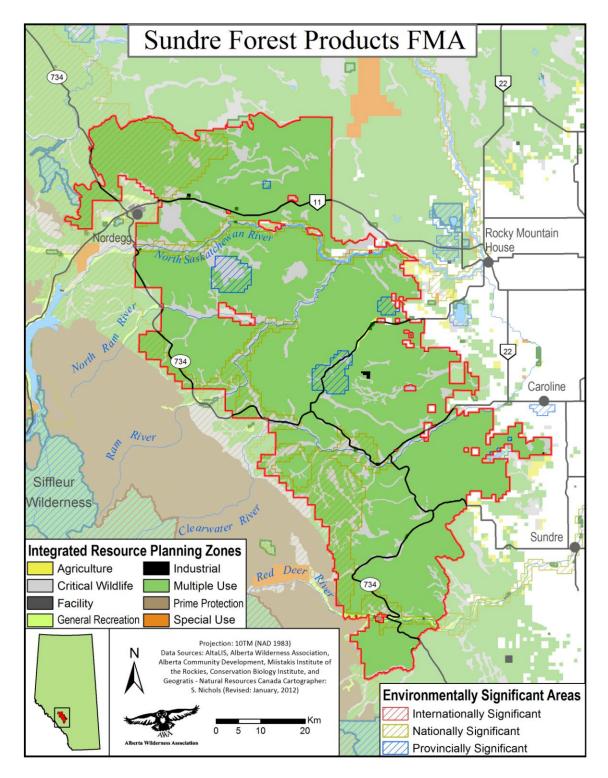


Figure 6. Map showing ESAs within SFP FMA area and IRP zones.

Conclusion

The Eastern Slopes of Alberta are a provincial resource worth far more when valued as the source of our fresh water, the home to vast numbers of plant and wildlife species, and areas suitable for a variety of low-impact recreational activities. Clearcut logging is entirely inappropriate as the first priority use of these forested landscapes, and public opinion clearly shows Albertans think that current forest management practices in the province are no longer acceptable. For example, results of a 2007 Alberta government public survey, published in the *Land-Use Framework Workbook Summary Report* revealed that:

- 71.8% of participants would be "willing to accept limits to Forestry development to provide for more Watershed Protection";
- 68.0% of participants would be "willing to accept limits to Forestry development to provide for more Protected Areas."

AWA supports the development of sustainable forest management models, in which local communities are able to fully participate and benefit from a myriad of forest functions, rather than simply timber supply. We feel decisions regarding public resources, such as the public forests of Alberta, must incorporate full and transparent public consultation.

We look forward to working with Sustainable Resource Development in developing ecosystem-based forestry models throughout Alberta, and hope the province will take this one-intwenty-year opportunity to incorporate prevailing public perceptions of forest values in the Sundre Forest Products Ltd. FMA renewal. We look forward to your reply to our request and our input regarding the renewal process and plans for this FMA.

Sincerely, ALBERTA WILDERNESS ASSOCIATION

m. Wilson

Madeline Wilson Conservation Specialist

c.c. Tom Daniels, <u>Tom.Daniels@westfraser.com</u>

Current members of the Sundre Forest Products Public Involvement Round Table, care of Tom Daniels, Chairman, <u>Tom.Daniels@westfraser.com</u> Laurie Blakeman, <u>Edmonton.centre@assembly.ab.ca</u> Rachel Notley, <u>Edmonton.strathcona@assembly.ab.ca</u> Guy Boutilier. <u>gboutilier@assembly.ab.ca</u> Board Members of the North Saskatchewan Watershed Alliance, care of David Trew, E.D. <u>david.trew@edmonton.ca</u> Board Members of the Red Deer River Watershed Alliance, care of Gerard Aldridge, E.D. <u>Gerard.aldridge@edmonton.ca</u>

References

- AGBRT (Alberta Grizzly Bear Recovery Team). 2008. Alberta Grizzly Bear Recovery 2008-2013. Prepared by Alberta Sustainable Resource Development, Fish and Wildlife Division. Alberta Species at Risk Recovery Plan No.15. Available online at: http://www.srd.alberta.ca/ FishWildlife/WildlifeManagement/BearManagement/GrizzlyBears/Default.aspx
- Alberta Environmental Protection, 1997. Environmentally Significant Areas of Alberta. Prepared by Sweetgrass Consultants Ltd. Available online at: http://tpr.alberta.ca/parks/heritageinfocentre/environsigareas/default.aspx
- Benn, B. 1998. Grizzly bear mortality in the central Rockies ecosystem, Canada. Eastern Slopes, Grizzly Bear Project. 1:151.
- Bessie, W.C. and Johnson, E.A. 1995. The relative importance of fuels and weather on fire behavior in subalpine forests. *Ecology*. **76**(3): 747-762.
- Carroll, A.L., Shore, T.L. and Safranyik, L. 2006. Chapter 6: Direct control: theory and practice. In L. Safranyik and B. Wilson (Eds.) 2006. *The mountain pine beetle: a synthesis of biology, management, and impacts on lodgepole pine*. Natural Resources Canada, Canadian Forest Service, Pacific Forestry Centre, Victoria, British Columbia.
- Fiera Biological Consulting. 2009. Environmentally Significant Areas Provincial Update 2009. ESA Map. Rocky Mountain and Foothills documents. Available online at: http://tpr.alberta.ca/parks/heritageinfocentre/environsigareas/default.aspx
- Government of Alberta. 2007. Land-Use Framework Workbook Summary Report. Prepared by The Praxis Group. Available online at: https://landuse.alberta.ca/Pages/LUF_Publications.aspx
- Johnson, E.A. and Larsen, C.P.S. 1991. Climatically induced change in fire frequency in the Southern Canadian Rockies. *Ecology*. **72**(1): 194-201.
- Krawchuk, M.A. and Cumming, S.G. 2009. Disturbance history affects lighting fire initiation in the mixedwood boreal forest: Observations and simulations. *Forest Ecology and Management.* 257:1613-1622.
- Lee, P. and Hanneman, M. 2011. Castle Area Forest Land Use Zone (Alberta) Linear disturbances, access densities and grizzly bear habitat security areas. Edmonton, Alberta: Global Forest Watch Canada 1st Publication for International Year of Forests.
- Parks Canada. Life after beetle: the story of Waterton National Park. 2009. Accessed: 02/27/2012. Available at: http://www.pc.gc.ca/eng/docs/v-g/dpp-mpb/sec4/dpp-mpb4b.aspx
- Rodtka, M. and Judd, C. 2011. Abundance and Distribution of Bull Trout in Elk Creek, Alberta, 2010. Data Report, D-2011-004, produced by the Alberta Conservation Association, Rocky Mountain House, Alberta, Canada.

- Rodtka, M. Judd, C., and Fitzsimmons, K. 2010. North Saskatchewan and Ram Rivers Bull Trout Spawning Stock Assessment, Alberta, 2007-2009. Technical Report, T-2010-001, produced by the Alberta Conservation Association, Rocky Mountain House, Alberta, Canada.
- Romme, W.H., Knight, D.H. and Yavitt, J.B. 1986. Mountain pine beetle outbreaks in the Rocky Mountains: regulators of primary productivity? *The American Naturalist:* **127**(4).
- Ripley, T., Scrimgeour, G., and Boyce, M.S. 2005. Bull trout (*Salvelinus confluentus*) occurrence and abundance influenced by cumulative industrial developments in a Canadian boreal forest watershed. *Canadian Journal of Fish and Aquatic Sciences.* **62**: 2431-2442.
- Safranyik, L. and Carroll, A.L. 2006. Chapter 1: The biology and epidemiology of the mountain pine beetle in lodgepole pine forests. In L. Safranyik and B. Wilson, (Eds.) 2006. *The mountain pine beetle: a synthesis of biology, management, and impacts on lodgepole pine*. Natural Resources Canada, Canadian Forest Service, Pacific Forestry Centre, Victoria, British Columbia.
- Shore, T., Safranyik, L., Hawkes, B.C. and Taylor, S.W. 2006. Chapter 3: Effects of the mountain pine beetle on Lodgepole pine stand structure and dynamics. In L. Safranyik and B. Wilson, (Eds.) 2006. *The mountain pine beetle: a synthesis of biology, management, and impacts on lodgepole pine*. Natural Resources Canada, Canadian Forest Service, Pacific Forestry Centre, Victoria, British Columbia.
- Strittholt, J.R., Staus, N.L., Heilman, G. and Bergquist, J. 2007. Mapping high conservation value and endangered forests in the Alberta Foothills using spatially explicit decision support tools. Report by the Conservation Biology Institute for Limited Brands.
- Sundre Forest Products. 2007. Mountain Pine Beetle Action Plan. Available online at: http://www.srd.alberta.ca/LandsForests/ForestManagement/ForestManagementPlans/SundreForest Products.aspx
- Timoney, K. and Lee, P. 2001. Environmental management in resource-rich Alberta, Canada; first world jurisdiction, third world analogue? *Journal of Environmental Management*. 63:387-405.
- Yarmoloy, C. and Stelfox, B. 2011. An assessment of the cumulative effects of land uses within the Ghost River Watershed, Alberta, Canada. Report prepared for the Ghost Watershed Alliance Society by ALCES Landscape and Land-Use Ltd..