The Muskwa-Kechika Management Area

A Model for the Sustainable Development of Wilderness?

BY JOHN SHULTIS and RON RUTLEDGE

Introduction

The economy of the province of British Columbia (BC) remains heavily dependent on resource extraction—the forestry sector is still its primary economic generator—but it is also known for its level of environmental concern. Indeed, since the birth of the modern environmental movement in the late 1960s, there has been an increasing number and intensity of political battles between resource extraction industries and residents calling for the preservation of wilderness and parklands in BC. This so-called "war-in-the-woods" reached a crescendo in the late 1980s, when valley by valley battles became commonplace (Wilson 1998).

A change of government in 1990 stimulated the development of a new model of decision making for natural resource management in BC. In 1992, the Commission on Resources and Environment (CORE) was legislated to "develop for public and government consideration a British Columbia-wide strategy for land use and related resource and environmental management" (CORE 1992, p. 39). This legislation specifically requested that a regional planning process founded on a community-based participatory approach be created. In 1994, the Land and Resource Management Planning (LRMP) process was adopted by the BC government in concert with the Protected Areas Strategy, which called for a doubling of BC parkland from 6% to 12% of the province (Province of British Columbia 1993).

The deep antipathy between the ideologies of stakeholders representing industry and conservation interests was often difficult to address, and the first two regional LRMP meetings were unable to reach consensus regarding which areas within their regions would be protected from normal extraction activities. After the government demonstrated it was willing to create protected areas despite the lack of consensus, the LRMP process began to move forward, though often at an excruciatingly slow pace.

In northeastern BC, two regionally based groups of stakeholders from government, industry, conservation, recreation, First Nations, and other interested parties began LRMP deliberations in 1992. The purpose of this article is to describe the innovative outcomes created by these two groups over more than five years of discussions. After briefly noting the ecological significance of the Muskwa-Kechika Management Area (MKMA), the vision and objectives of the MKMA are outlined, and the means of achieving these objectives through distinct legislation and policy are reviewed. The article specifically highlights the central role that the concept of wilderness plays in the management of the MKMA. Finally, the MKMA's successes and future challenges are identified.

The Muskwa-Kechika Management Area

When the MKMA Act was passed by the government of BC in 1998, it formalized the creation of the largest conservation system in North America. When a third LRMP region joined the system in 2001, the MKMA grew to 6.3 million hectares, or over 24,000 square miles, an area the size of West Virginia or Ireland (see Figure 1). It is one of the few remaining large, ecologically intact, almost completely unroaded wilderness south of the 60th parallel, and as such, contains wildlife populations of truly global significance (British Columbia 1997b).

In addition to its globally significant wilderness, biodiversity, and ecological values, the MKMA also contains

numerous resource development values. Most significant are well-defined oil and gas fields, a variety of metallic and nonmetallic resources, forests, and various wilderness recreation and tourism resources. As the MKMA has been used by First Nations for thousands of years, many cultural and heritage values are also present, including archaeological sites, historical sites, and traditional use sites, each of which retains high cultural significance to living communities.

According to the preamble of the enabling legislation:

> The management intent for the Muskwa-Kechika Management Area is to maintain in perpetuity the wilderness quality, and the diversity and abundance of wildlife and the ecosystems on which it depends while allowing resource development and use in parts of the Muskwa-Kechika Management Area designated for those purposes [recognizing the] long-term maintenance of wilderness characteristics, wildlife and habitat is critical to the social and cultural well-being of [F]irst [N]ations and other people in the area. (British Columbia 1998a, p. 1)

The Muskwa-Kechika Advisory Board is an appointed body responsible for advising the premier of BC on natural resource management in the MKMA. The Board: (1) monitors development to ensure activities within the region are consistent with the intent of the three LRMPs, the MKMA Act, and the MKMA Plan; (2) makes recommendations to the trustee on the Muskwa-Kechika Trust Fund; and (3) provides an annual report on these matters to the premier and public (e.g., Muskwa-Kechika Advisory Board 2001).

While the maintenance of the wilderness quality of the MKMA is formally entrenched in legislation, the concept of wilderness has yet to be adequately defined by the MKMA. A draft definition states:

> Wilderness is evident over large areas where human activities and constraints are at levels that allow for the perpetuation of characteristic natural processes, and the presence of the full complement of plant and animal communities characteristic of the region. While non-permanent, site specific disturbances and activities will be evident, the overall naturalness, biological diversity and ecological integrity of the MKMA will be maintained. (MKMA, unpublished photocopy, undated)

Many difficult questions are raised, but not yet answered by this definition, perhaps reflecting future issues to be addressed by the MKMA in balancing wilderness and resource development. For example, the issue of how naturalness might be conceptualized and operationalized has yet to be adequately addressed in the literature; similarly, the question of how the concepts of biodiversity and ecological integrity might be measured and monitored in the field remains unclear.

A New Model for Wilderness Management?

The MKMA basically seeks to create a sustainable development model for what is now a de facto wilderness area, and in this sense is not particularly unique. Resource development is permitted in most areas of the MKMA (outside of designated protected areas), and operational plans must consider and address all other significant values present on the land base, such as fish and wildlife habitat, wilderness recreation and tourism, visual quality, cultural/heritage, and major river corridors (British Columbia 1998b). This

Figure 1—Map of the MKMA.

approach equates to an integrated resource management and ecosystem management approach used in numerous places around the globe.

However, in our view, the MKMA is unique in the way in which it combines several strands of current, state-of-knowledge thinking. It must be noted that the baseline ecological health and integrity of the MKMA is unusual: Predator-prey relationships are intact and preserved at the ecosystem scale, primarily because of low human populations levels and the absence of an established road system with its associated habitat fragmentation. However, the model is unique in its landscape level use of the wilderness concept to frame the maintenance and management of the sizable region, not just designated protected areas within the MKMA.

The structural components of management are also innovative, in large part because of the grassroots level development of the MKMA ideal; as the agreement was created by local residents, they demanded that local residents (via the Advisory

Figure 2—Trail riding is a popular recreation activity in the MKMA. Photo courtesy of John Shultis.

Board) manage the region rather than the traditional bureaucratic agencies. They also convinced a reluctant government to provide a trust fund for the region. Originally, $2 million annually were added to the trust fund from general revenue funds, although a change to a more fiscally conservative government has seen this figure reduced to $1 million per year. Using interest income from this fund, the Advisory Board is able to conduct significant amounts of research each year. This commitment to research is also reflected in the partnership created with the University of Northern BC, which has created a Muskwa-Kechika professorship, graduate student scholarship, and annual research funding (British Columbia 1999). The vision statement of the Advisory Board clearly reflects this interest in research as they "will promote and encourage effective and innovative resource management methods, based on the highest quality research. Through research and funding activities, [they] seek world class management, monitoring, and mitigation to minimize the human footprint" (Muskwa-Kechika Advisory Board 2001, p. 4).

Most research follows the tenets of conservation biology, which has become an influential lens through which to view ecosystems at the landscape level (e.g., Soulé and Terborgh 1999). As a result, concerns with future development focus on connectivity between landscapes, maintaining core (i.e., protected) and buffer areas, managing at the landscape scale, habitat fragmentation, and the maintenance of predator-prey relationships. A Conservation Areas Design plan is currently being generated to direct the management of the MKMA in relation to the location, level, and type of development activities allowed and their potential impact on ecological processes in the area. In addition, five smaller-scale legislated planning processes—recreation management plans, wildlife management plans, landscape unit objectives (forest planning), parks plans, and oil and gas pretenure plans—have been completed or are in progress by either the MKMA and/or the relevant government ministry.

Zoning is consistent with previous systems, and yet somewhat unique. The three main zones are Special Management Zones and Enhanced Resource Management Zones (covering 57% of the MKMA), and Protection Management Zones (27% of the MKMA). Each zone and its accompanying objectives were given legal status through the MKMA Act. The 2001 MacKenzie addition to the MKMA included a separate wildland zone, incorporating almost 50% of the addition (or 16% of the MKMA), which allows mineral extraction but not timber harvesting; only temporary roads are permitted in this zone (Craighead Environmental Research Institute 2002).

The Special Management Zones are perhaps the key to creating a balance between resource use and wilderness preservation. These zones, which allow resource development, attempt to ensure that such development has minimal effects on the ecological integrity of the MKMA. In essence, they are large buffer zones, which have often been requested by conservationists but have rarely been established around protected areas due to the commercial concerns of private landowners or public land management agencies. According to the MKMA Act, "The long-term objective is to return lands to their natural state as development activities are completed" (British Columbia 1998a, p. 1). Thus, ecological restoration, which has often proven to be controversial in other locations (Gobster and Hull 2000), is

Encourage others to create similar unique, grassroots approaches to wilderness management at the landscape level.

central to the concept of Special Management Zones.

Several changes to local strategic planning processes have also occurred. Perhaps most importantly, joint plan approval is required. In the past, planning approvals for resource developments and recreation use in BC have been the sole responsibility of that provincial agency under whose legal mandate the specific activity fell (e.g., Forest Development Plans were approved by the Ministry of Forests). To ensure an enhanced degree of integrated management in the MKMA, joint approvals are required for the various local strategic plans (e.g., timber harvesting, oil and gas exploration, or development). Accountability is shared across government agencies having a broad spectrum of environmental and development mandates.

In terms of funding, the MKMA legislation created a new funding mechanism to guarantee an enhanced and stable level of support from the government in combination with private sector funding. In addition to the previously noted Muskwa-Kechika Trust Fund, which provides $1 million annually until 2005, the legislation enables tax-deductible private sector donations to the trust fund that allow a company or interest group to champion or support a project. These donated funds are now matched up to $1 million per year by the government. It is important to note that the trust fund is not intended to replace the annual operating budgets for the resource management agencies in the northeast, but rather to support MKMA-specific planning initiatives and special projects. Again, much of this funding is dedicated to ecological and social research in the MKMA and toward communicating research findings to the communities of the region (MKMA 2003).

Figure 3—Camping beneath the Hoodoos in the Wokkpash Gorge. Photo courtesy of John Shultis.

Finally, a formal role for aboriginal people's participation in implementing the vision for the MKMA has been negotiated. Management of protected areas and Special Management Zones in the area recognize local First Nations (Kaska Dena) rights, culture, and history. Recognition is given to the right of the Kaska Dena to harvest fish and wildlife using traditional or contemporary harvesting methods in accordance with their aboriginal rights to harvest for sustenance, social, and ceremonial purposes. Several First Nations' representatives serve on the Advisory Board (currently seven out of 20 board members). While First Nations are occasionally consulted on aspects of land and resource management in BC, this agreement ensures an enhanced and more formalized role for their participation in the MKMA (British Columbia 1997a).

Current Successes and Future Challenges

The MKMA model provides some meaningful questions to supporters of the wilderness concept. Can the ideas of wilderness and development ever be compatible? In a wild landscape covering over 6.3 million hectares (over 24,000 square miles), can the idea of maintaining wilderness quality be used to guide land use allocation decisions, including resource extraction, or does the idea simply degrade the idea of wilderness? Can a diverse group composed of First Nations, members of the public, and representatives from resource extractive industries successfully maintain the wilderness character of the region, or even agree on how this wilderness character might be defined and measured?

The question of whether the Advisory Board will be allowed to direct and manage (i.e., restrict) economic activity in the MKMA region is also unanswered. Will individuals and communities accept a slower rate of development and the possibility of fewer jobs and other economic spin-offs arising from such actions? Will corporations accept the changes to operational policies that will be necessary to "maintain in perpetuity the wilderness quality, and the diversity and abundance of wildlife and the ecosystems on which it depends" as set out in the MKMA Act? The issue of minimizing the creation and maximizing the

Figure 4—Trapping is a traditional activity in the MKMA; old trappers cabin near Harworth Lake. Photo courtesy of John Shultis.

deactivation of roads typically developed for forest and oil and gas development is perhaps the greatest challenge in this regard, as the relationship between road construction and the destruction of wilderness and ecological integrity is well documented (e.g., Havlick 2002).

Perhaps most importantly, will the provincial government allow the Advisory Board to challenge its vision for the region? While the MKMA Act has distinct legislation that empowers and directs the MKMA Advisory Board to manage the region, it remains Crown land owned by the province of BC and is subject to existing government policy. Since 2001, a new, more fiscally conservative government has made significant changes to environmental protection and resource extraction policies. For example, a new results-based policy for Crown land management is being implemented, and industries are basically allowed to write their own management plans as long as they meet specific guidelines set by the government. Critics argue that the enforcement of these results is haphazard at best. Indeed, the enforcement of all types of activities in this remote region (e.g., hiking, logging, mining, or hunting) is recognized by the Advisory Board as extremely problematic, given the size of the region and the decreasing amount of conservation services provided by the government. The current BC government is moving to double the number of oil/gas wells in BC, and has expedited the development of pre-tenure plans for oil and gas development in the MKMA (Craighead Environmental Research Institute 2002).

Thus, many individuals, groups, and social forces will pressure the Advisory Board to maintain the economic status quo (i.e., to facilitate and maximize economic development), and these pressures can only be deflected by strong public support for this new vision. While such support—due in large part to the consensus-based LRMP process and the leadership and vision of the original two LRMP groups in the Fort St. John and Fort Nelson regions—is currently widespread, constant vigilance will be required to maintain it.

In terms of its successes, from its very creation the MKMA has been an innovative community-based approach to sustainable wilderness landscape management. The original LRMP process brought stakeholders together and allowed them to seek consensus on how the land and water base would be managed, while doubling the size and number of protected areas in the province. While other regions were not able to reach such a consensus, stakeholders in three northeastern BC regions agreed to create a unique, comprehensive approach to land use and wilderness management. No other regions in BC created such an integrated, long-term approach to sustainable land use or utilized the concept of wilderness landscapes in distinct legislation to frame regional management.

Through the Advisory Board and agreements with First Nations communities, local residents have taken control over the management of the MKMA to ensure that the agreed-upon objectives in the legislation and policies are met. While the concepts of sustainable development and community-based conservation are currently seen as saviors of 21st-century global conservation, there have been few examples of long-term success as measured by increased ecological health and/or integrity in these areas. Even rarer are areas with largely intact ecological systems, landscapes large enough to maintain ecological processes, and reserves with adequate funding (Terborgh et al. 2002). It is hoped that the MKMA will prove to be successful in maintaining the wilderness of northeastern BC and encourage others to create similar unique, grassroots approaches to wilderness management at the landscape level.

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JOHN SHULTIS is an associate professor in the Resource Recreation and Tourism Program, University of Northern BC, 3333 University Way, Prince George, BC, Canada V2N 4Z9. E-mail: shultis@unbc.ca.

RON RUTLEDGE, former MKMA program manager, resides in Taos, New Mexico.

Figure 5—The MKMA supports a diverse number of large mammals, including these young caribou. Photo by Ken Meadows.

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concerns over the impact of automobile-based tourism on the wilderness. According to Sutter, "What made modern wilderness distinct, separate from the national park ideal, was the *critique* of consumerism that was central to it" (p. 16; emphasis in original). For example, Leopold, in his *Wilderness as a Form of Land Use*, published in 1925, stated that "Generally speaking, it is not timber, and certainly not agriculture which is causing the decimation of wilderness areas, but rather the desire to attract tourists" (cited on page 81). Sutter further suggests that before and after the interwar period, the politics of wilderness focused on the traditional utilitarian conservation versus preservation battle lines.

The founders of The Wilderness Society were responding to a wave of publicity from land agencies eager to maximize the use of protected areas, and to the unprecedented wave of public spending on the infrastructure (e.g., roads, campgrounds, trails) necessary to facilitate and attract users. They were also responding to the broader concerns of the nascent consumer society created in the interwar period; the outdoor recreation craze of the interwar period was itself a manifestation of Americans' newly found predilection and desire to increase consumption. Many were concerned that the automobile would irrevocably alter the wilderness experience, from a constructive and introspective to a more escapist, mechanistic, and destructive experience.

Sutter provides convincing evidence of early wilderness leaders' fixation on the potential impact of consumerism and recreation development on wilderness. While Sutter occasionally is a little overzealous in focusing on his primary theme, *Driven Wild* succeeds in providing an interesting and unique analysis of the rationales provided by wilderness leaders for creating a new society to champion the concept of wilderness in the oft-overlooked interwar period. Readers interested in the history of the American wilderness movement will appreciate this distinctive and impassioned analysis, and will be reminded of the long history of concerns over our consumption patterns on wilderness.

Reviewed by JOHN SHULTIS