# Glacier National Park and Its Neighbors: A Twenty-Year Assessment of Regional Resource Management

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#### Introduction

THIS ARTICLE IS A SUMMARY UPDATE of our mid-1980s study of external threats to Glacier National Park (Sax and Keiter 1987). In 1980, the National Park Service's *State of the Parks Report* identified Glacier as the most threatened major park unit, detailing an assortment of energy exploration, timber harvesting, road construction, and other development activities emanating from adjacent federal and private lands that potentially imperiled the park's ecological integrity (National Park Service 1980). With the passage of twenty years and the emergence of new ecological management concepts, we returned to Glacier to assess how the park has fared over the intervening years and the progress it has achieved in integrating the park into a larger regional management agenda.

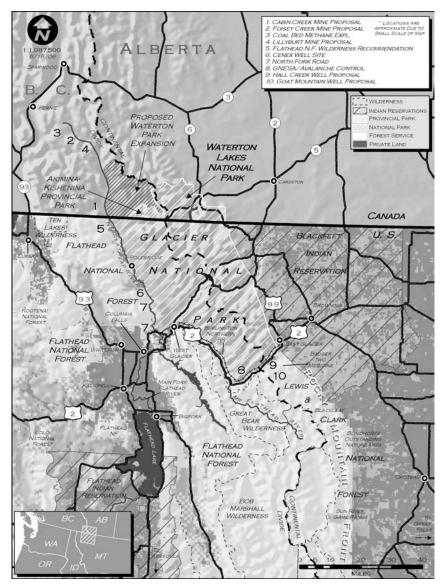
External threats have been a persistent problem for the National Park Service (Sax 1976; Keiter 1985; U.S. General Accounting Office 1987, 1994; Freemuth 1991; National Parks and Conservation Association 1992). Once viewed as isolated enclaves, even the most remote national parks must now regularly contend with recurrent development proposals and related environmental pressures on their borders. We discovered in our earlier study that the Park Service rarely availed itself of legal remedies that it might invoke to protect park resources, and that Glacier officials were also reluctant to speak out forcefully against development proposals. They often relied on others, in particular environmental advocates, to do much of the heavy lifting for them in protecting park resources, while depending on the park's status as a "sacred cow" to ward off the most serious threats. Very little has changed in that regard.

Glacier provides an ideal setting to study the external threats problem. Like many parks, it was established primarily for its spectacular scenery and abundant wildlife in a pre-ecological era with little regard for such natural features as watersheds or wildlife habitat. As reflected in the following figure, the park is bordered by an assortment of neighbors: two national forests, the Blackfeet Indian Reservation, two Canadian provinces, a sister national park in Canada (Waterton Lakes), and various private landholdings. The region also features two designated wild and scenic rivers, a major east–west highway and railroad line, several wilderness areas, and various federally protected threatened and endangered species, most notably the grizzly bear. This leaves Glacier as an island amid a vastly larger ecological region

that encompasses the North Fork watershed, the Rocky Mountain Front, and internationally significant wildlife habitat extending outward from its borders in every direction.

Glacier still confronts several of the same problems it faced twenty years ago. Our earlier study focused on four potential threats: timber harvesting and energy exploration in the Flathead National Forest; a road paving proposal that would facilitate access into the park's remote northwestern corner; a highly contentious Canadian coal mine proposal in the North Fork watershed; and energy development proposals pending in the Lewis and Clark Na-

Figure 1. The Glacier National Park Region. © University of Utah Department of Geography DIGIT Lab.



tional Forest on the park's southeastern flank in an area known as the Badger-Two Medicine, where the Blackfeet claim treaty access rights. This study revisited these issues and examined several new ones as well, including new energy development proposals in the Canadian Flathead, escalating private land development in the Flathead Valley, and motorized recreation in the national forests (Jamison 2005a).

Our central concern was to determine whether ecologically rational management—embracing actual wildlife habitat and watersheds rather than formal territorial boundary lines—has become a reality in the extraordinarily resource-rich Glacier region. We begin by noting changes over the past two decades in federal agency management policies and personnel, as well as in the demographics and economy of the region. We then use case studies to examine in detail the key external issues confronting the park—namely, timber harvesting in the Flathead National Forest, private land development in the Flathead Valley, energy exploration in the Lewis and Clark National Forest, and energy development proposals in the Canadian Flathead—and observe how these issues have fostered a new, though incomplete, regionalism. We conclude by noting that the past several decades have generated a good deal of progress toward environmentally driven regional land management, by explaining how this has been occurring in one place, and by offering some broader park resource protection strategic observations.

#### Glacier revisited

Since our prior study, Congress has not altered the basic statutory framework governing the Park Service and Forest Service. The National Park Service [Organic] Act, Multiple Use-Sustained Yield Act, National Forest Management Act (NFMA), National Environmental Policy Act (NEPA), and the Endangered Species Act (ESA) are all intact, even as controversy has swirled around several of these laws. Newer laws, like the National Parks Omnibus Management Act, the National Parks Air Tour Management Act, and the Healthy Forests Restoration Act of 2003 (HFRA) have altered but not fundamentally changed the legal land-scape.

Of much greater potential import are developments emanating from the agencies themselves. Most notably, during the 1990s the Clinton administration embraced the ecosystem management concept as it sought to shift federal natural resource policy toward landscape-scale planning and biodiversity conservation (Szaro et al. 1998; Thomas and Ruggiero 1998). The Forest Service responded by making fundamental changes to its NFMA planning rules, giving priority to ecological sustainability for policy purposes (Hoberg 2004), and undertaking several landscape-scale planning initiatives (Keiter 2003). Notwithstanding the Bush administration's quite different policy priorities (Scarlett et al. 2004), the result has been a dramatic reduction in emphasis on timber production, a new commitment to ecosystem management principles, and a significant restructuring of the agency's workforce toward greater disciplinary diversity.

Although changes within the Park Service have not been as extensive, the agency has revised its basic management policies document to instruct park managers to "use all available tools to protect park resources and values from unacceptable impacts," to "encourage compatible adjacent land uses," and to work cooperatively with neighbors to mitigate potential unacceptable impacts (National Park Service 2006). These provisions legitimize, even



The Garden Wall, an arête separating Lake McDonald Valley from Many Glacier Valley, is one of the park's prominent geological features. Photo courtesy of Glacier National Park.

oblige, the involvement of national parks, like Glacier, in issues beyond their borders. But they do not give park officials any new powers that extend beyond park boundaries.

At Glacier itself, change began in the late 1980s, when Superintendent Gil Lusk—described by one employee as a "new paradigm manager"—said, "let's get off the island." Lusk issued a striking management strategy document that called for a proactive approach to both external and internal park threats, including "[p]articipat[ion] in other planning processes in the region that have an effect on Glacier ... and expansion of our review and comment on other agency plans" (U.S. Department of the Interior 1987). He also hired a new ecosystem coordinator, who proceeded to conceive a "Crown of the Continent" regional initiative. Moreover, Glacier has revised its general management plan and resolved "to manage most of the park for its wild character and for the integrity of Glacier's unique natural heritage" (U.S. Department of the Interior 1999). Though focused primarily on internal park issues, the plan has a strong ecosystem flavor, highlighting Glacier's special designations—the world's first international peace park, a World Heritage site, and an international biosphere reserve—as well as its role "at the core of the 'Crown of the Continent' ecosystem, one of the most ecologically intact areas remaining in the temperate regions of the world."

There have also been significant changes outside the park. On the neighboring national forests, timber and energy development have seemingly receded in importance while off-road vehicle (ORV) management has become more troublesome. Perhaps the most notable change, however, has been the flood of new residents and corresponding development pressures, primarily in the Flathead Valley between the park and Kalispell. And across the international border, the Canadian Flathead is again facing intense mining and energy development pressures driven by international market forces and local economic pressures.

#### The Flathead National Forest

Glacier's westernmost neighbor—the Flathead National Forest—provides a dramatic example of transition away from traditional conflict among adjacent federal enclaves and toward a more ecologically managed area. When we visited in 1986, the Flathead projected massive timber sales and was intent on issuing oil and gas leases to promote energy exploration, some in the North Fork area adjacent to the park. It had also supported paving the North Fork to enable access into that remote region. While the Flathead supervisor was willing to consider Glacier's concerns, managerial discretion was the forest's primary modus operandi.

Though developmental issues are not entirely off the table today, management of the Flathead forest has continued to evolve in a way that benefits the park. Such changes, however, are attributable more to hard-edged legal standards, third-party watchdogs, and local socioeconomic trends than to any concerted strategy pursued by park or forest officials. Regardless, park and forest officials both report that their mutual relations are cordial today, though they each are still quite conscious of their separate mandates. And the two agencies do not always reinforce each other, as reflected in the Forest Service's non-involvement in cross-border Canadian energy development issues and local private land development issues.

The most notable change in the Flathead over the past twenty years has been a major reduction in its timber program. As a result of steady ESA litigation pressures related to the grizzly bear (see, e.g., Resources Limited v. Robertson, 35 F.3d 1300 (9th Cir. 1994)), the Flathead has cut its timber harvest levels from 100 million board-feet (mbf) annually to 54 mbf, reduced the forest's road density by 15% (from 1,900 to 1,600 miles), and adopted oldgrowth timber cutting limitations (U.S. Forest Service 1995, 1999). Despite concerns about possible ESA "delisting" of the Northern Continental Divide grizzly bear population, this appears unlikely at the present time, which means these restrictions will remain in place. Moreover, several new local species, including the Canadian lynx and bull trout, have been added to the endangered species list and will also affect future forest management decisions.

Protection of the remote North Fork region continues to be a major concern for Glacier managers. But when a troublesome North Fork road paving proposal resurfaced a few years ago, the park remained silent (unlike its active opposition twenty years earlier) as did the Forest Service (thus altering its earlier supportive stand). The proposal has died for now due to lack of funds. Since finding themselves enjoined from oil and gas leasing during the 1980s by a court order (Conner v. Burford, 848 F.2d 1441 (9th Cir. 1988)), Flathead officials have taken no further action to facilitate energy exploration in the North Fork or elsewhere on the forest. Although a contentious exploratory well was drilled on private North Fork lands adjacent to the park during the late 1980s, it was a dry hole, which has apparently discouraged any renewed interest in the area. Moreover, the Flathead's recent forest plan revisions recommend a new wilderness designation adjacent to the park in the North Fork region (U.S. Forest Service 2006). But this does not relieve forest officials from the need to deal with the burgeoning ORV activity in the area.

South of Glacier in the Highway 2-railroad corridor, the two agencies have joined with Burlington Northern railroad and others to form the Great Northern Environmental Stewardship Area (GNESA) partnership. In an effort to reduce accidents between trains and griz-

zly bears and thus avoid potential ESA section 9 "take" liability, GNESA is engaged in developing an ESA-based habitat conservation plan (U.S. Fish and Wildlife Service 2005). Although Burlington Northern has limited the train management options on the table, Glacier officials speak positively of this initiative. A related Park Service environmental impact statement (EIS) process to address avalanche control for the railroad tracks will be a real test of this relationship, given Burlington Northern's support for firing artillery shells onto park mountainsides to control the avalanche danger (Jamison 2006).

## Private lands in the Flathead Valley

For many decades, Glacier, like other older western national parks, was insulated from the common problems of urbanization by its isolation and by the region's sparse population. That is no longer true. Flathead County, which lies just west of Glacier, has experienced an extraordinary rate of growth. Its population increased 26% between 1990 and 2000, and another 9% from 2000 to 2004. Although the majority of that increase has occurred farther out in the Flathead Valley, there is residential development close to the western border of the park, along the North and Middle Forks of the Flathead River, and in the corridor between West Glacier and Columbia Falls. Some of that development has impacted prime winter range just beyond the park's border.

From the park's perspective, the new residents and improved roadways are a mixed blessing. Overwhelmingly, those who move to the area these days do so because of the aesthetic and recreational benefits that Glacier and its surroundings provide. These newcomers generally do not depend on the traditional commodity uses of the region's public lands, which makes them compatible neighbors for the park. At the same time, they resist having anyone tell them what they can or cannot do with their land.

The political situation in the Flathead Valley is in flux, and the local public's willingness to accept managed growth remains uncertain. During the 1990s, the county was a cauldron of heated conflict over land use controls, triggered initially by a property rights-based revolt against a proposed county master plan that contained progressive new open space protections (Williams 1994; Ring 2003). The atmosphere, according to one pollster, was "as hostile a political environment for conservation that he [had] ever encountered." While the sit-

uation is still uncertain, the extreme tensions of the past decade have begun to give way to a more conciliatory approach and to increased public willingness to address the problems presented by growth.

As importantly, pursuant to state law, the county was obliged to revise its master plan and adopt a growth policy by late 2006. Though still a work in progress, the guiding "vision" is to "properly manage and protect the natural and human environment" and to "preserve the rights of private property owners" (Flathead County Planning & Zoning Office 2006). But thus far, most of



New construction in a subdivision in the foothills north of Whitefish, Montana, west of the national park. The area was formerly transitional habitat for grizzly bear. Photo courtesy of Steve Thompson.

the county's growth control initiatives have been limited, involving issues like traffic congestion and drinking water quality—matters that directly affect the residents' lifestyle and convenience—as contrasted with land use controls designed to accommodate wildlife needs. Not surprisingly, Glacier officials have played little role in this ongoing debate. Even the progressive county commissioner who we interviewed displayed little interest in engaging park officials in the dialogue or in protecting the park, which he thought was big enough to absorb peripheral development.

It is still too early to say whether success will reward this moderate approach to local land use control. While there have been a number of positive developments in the last several years, the critical and unresolved question is whether the "soft" approach, without the iron fist of legal coercion in the background, can do the job.

#### The Lewis and Clark National Forest

Twenty years ago, oil and gas development in the Badger-Two Medicine area of the Lewis and Clark National Forest appeared as the most immediate and most potentially damaging domestic external threat that Glacier faced. Despite ongoing litigation and Blackfeet tribal ambivalence, we observed that "[p]ark officials now are reconciled ... to ... exploratory drilling ... [and] rest their hope on the chance that commercial quantities of oil and gas will not be discovered in environmentally critical areas." Two decades later, however, things could hardly look more different. There has still been no exploratory drilling in the Badger-Two Medicine area, the major oil companies that held leases there have effectively left the area, the Blackfeet now "strongly object to any development in ... the Rocky Mountain Front (St. Goddard 2004)," and the Bush administration has suspended further leasing or exploration along the entire Front.

Unlike the situation twenty years ago, it is generally understood today that the Front area is unlikely to be richly rewarding for hydrocarbon production. Yet for over a decade, despite organized opposition and successful administrative appeals, the Forest Service three times approved an exploratory well at the Hall Creek site, largely ignoring critical comments from Glacier officials. But the Forest Service could not ignore opposition from the Blackfeet tribe, which claimed treaty-based access rights to the Badger-Two Medicine area. At about the same time, public opinion along the Front was beginning to shift in favor of maintaining wildlife and outdoor values, even at the expense of some potential energy development.

The third Hall Creek well approval in January 1993 seems to have been the last stand of the pro-development forces in the Badger-Two Medicine area. After losing another administrative appeal and in response to tribal concerns, the Forest Service undertook a comprehensive traditional cultural district (TCD) study of the area pursuant to the National Historic Preservation Act (NHPA). The question was whether to designate the entire Badger-Two Medicine area, including the Hall Creek well site, a TCD, which would then require a NHPA "adverse effect" consultation before drilling could commence. Because any such determination would be seen as harmful to traditional Blackfeet uses, and for the enrichment of an oil company, the designation would act as a powerful (though not formally coercive) deterrent against development. With a new TCD study now underway, most observers believe that eventually an expanded TCD designation will incorporate the Hall Creek site, which will in practice doom oil and gas operations there (Bradley 2002).

In the mid-1990s, a new forest supervisor named Gloria Flora was named to head the Lewis and Clark forest. Trained as a landscape architect, Flora was the very embodiment of the "new" Forest Service. With the Badger-Two Medicine leases suspended and the TCD study underway, Flora initiated an EIS process to address the broader question of oil and gas leasing on the Rocky Mountain Front, where an earlier federal court injunction had stopped all leasing (Bob Marshall Alliance v. Hodel, 852 F.2d 1223 (9th Cir. 1988)). Citing extensive public opposition and the "value of place," Flora startlingly decided not to offer any national forest lands for lease in the Front area for the next 10–15 years (U.S. Department of Agriculture 1997). This no-leasing decision was later upheld by the courts (Rocky Mountain Oil & Gas Ass'n v. U.S. Forest Service, 12 Fed. App'x 498 (9th Cir. 2001)).

While Flora's decision galvanized local public opinion, it did not create it. There has long been recognition that the Rocky Mountain Front is a special place, as reflected in the federal protection given the nearby iconic Bob Marshall Wilderness Area, the state protection given the Sun River Game Range, and other organized private land conservation efforts by the Boone and Crockett Club, The Nature Conservancy, and others.

Public concern about protecting the Front has generated action on other forest management issues as well. Timber harvesting had already been significantly reduced at the time of our previous study, and those reductions have been maintained. But over the past 15 years, ORV use has erupted along the Front, leading one knowledgeable visitor to observe: "ATVs [all-terrain vehicles] run amok in the Badger-Two Medicine area... Trails are now as wide as Central Avenue." In response, the Forest Service initiated a revised travel plan process,

The Bob Marshall Wilderness Area, south of the park, is one of the most highly regarded units of the national wilderness preservation system. Photo courtesy of Cal Tassahari, Swan Ecosystem Center.







As ORV use along the Rocky Mountain Front east of the park increases, damage from the machines has become a major resource management concern. Photos courtesy of Cameron Naficy / Native Forest Network

which generated 37,000 comments with 98% favoring elimination of all motorized access (Lee 2005). Most observers expect the Forest Service to adopt the protective option, which will reinforce the notion that the Rocky Mountain Front region is an area that should be generally managed for the protection of its resources.

Other important developments have further protected the Front from industrial incursion. In 2001, at the behest of the Clinton administration, the Front was withdrawn from hardrock mining activity. Three years later, faced with substantial local opposition to a controversial exploratory drilling proposal, the Bush administration announced that it was suspending further oil and gas activity in the area (Lee 2004). The suspension, though temporary, will enable the agencies to prepare a region-wide environmental assessment on the Front and to make decisions about the long term future of this special ecosystem. At the same time, the U.S. Fish & Wildlife Service announced a proposal to place conservation easement protection on about 170,000 acres along the Front, which would add an important lower-elevation buffer. And Congress has now entered the picture with legislation that permanently withdraws Forest Service and Bureau of Land Management lands along the Front from mineral leasing and mining, and offers a tax incentive to encourage the sale of existing leases to conservation organizations (P.L. 109-432 sec, 403). Thus, consistent with the prevailing public sentiment, the Front is being protected from industrial incursion, and environmental, recreational, and Indian interests are ascendant, all of which bodes well for Glacier.

#### The Canadian Flathead

Glacier once again faces the prospect of extensive mineral development across the international boundary in the Canadian Flathead region. Located in southeastern British Columbia, the Canadian Flathead country extends for roughly 40 miles along the North Fork of the Flathead River, which also forms Glacier's western boundary. The remote and uninhabited Canadian Flathead has unsurpassed water and air quality, and provides important habitat for the grizzly bear and other wildlife species, making it a vital part of the larger Crown of the Continent Ecosystem. During the mid-1980s, the Sage Creek Coal Company planned to open a large open-pit coal mine in the pristine Cabin Creek drainage just eight miles north of the park. Glacier, joined by the state of Montana and an array of allies, vigorously resisted and ultimately secured a favorable ruling from the International Joint Commission (IJC) that squelched the threat (International Joint Commission 1988). Now the park faces multiple mineral development threats within the same watershed, and it may no longer be possible to employ the strategies that safeguarded it in the past.

Most of the Canadian Flathead is owned by the British Columbia provincial government, which is reportedly quite interested in developing it to help finance the upcoming winter Olympics and to garner additional revenues. The expansive Crowsnest coalfield underlies the headwaters of both the Elk and Flathead rivers, and mining has a long and productive history in the Elk River drainage. Of metallurgical quality, most of the coal is destined for Asia and its ravenous steel industry. With the conservative party in control of the province, British Columbia has aggressively pursued economic development opportunities, repealed





already-weak environmental protection standards, and shown little interest in protecting the Canadian Flathead's environmental assets.

With two major mineral development proposals on the drawing board, the Canadian Flathead faces an uncertain future that could transform it into an industrial zone. Most imminent is the Cline Mining Company's proposal to construct a large open-pit coal mine on Foisey Creek in the upper reaches of the watershed (Jamison 2005c). A second potential project involves coalbed methane; exploratory wells have already been drilled at two sites near Foisey Creek. Three other mineral development projects lurk in the background, including a potential gold mine and two other coal mines. The environmental impacts from these projects would be significant by any measure: an expansive infrastructure of roads and pipelines that will fragment wildlife habitat and sever migration routes, as well as air and water quality impacts, including toxic pollutants and sedimentation, that will reverberate throughout the watershed.

Were these development proposals pending in the United States, several strong environmental laws would come into play, but that is not the case on the Canadian side. Indeed, under Canadian and British Columbia law, it is unclear whether these projects will undergo meaningful environmental analysis or other serious scrutiny. At the federal level, the critical question is whether the Canadian Environmental Assessment Act will apply, while at the provincial level, British Columbia's recently streamlined Environmental Assessment Act vests initial environmental analysis responsibility with the project proponent, subject to provincial review. Besides, there are no real cumulative effects analysis requirements or any law similar to the U.S.'s Endangered Species Act, and neither the Canadian courts nor provincial officials are likely to intervene in any event.

The prospect of industrial development in the Canadian Flathead is particularly troublesome given the effort that has gone into protecting the adjoining landscape on the U.S. side of the border. Besides Glacier National Park with its multiple special designations, the Bob Marshall Wilderness complex, the Flathead River's wild and scenic status, and the Forest Service's pending North Fork wilderness proposal all reflect a deep commitment to preservation. A similar but less expansive commitment is evident on the Canadian side, including Waterton Lakes National Park, the adjoining Akamina-Kishinena Provincial Park, and a Waterton expansion proposal that would extend the park's boundaries into the North Fork drainage—a move that has been resisted by the British Columbia government (Johnson 2005).

One potential solution—and the one that succeeded twenty years ago—would be a referral to the IJC. During the mid-1980s, when confronted with the Cabin Creek mine proposal, Glacier and Montana officials convinced the State Department to invoke the International Boundary Waters Treaty of 1909 (36 Stat. 2448). The treaty provides for referring U.S.—Canadian transboundary environmental disputes to the IJC for resolution, so long as both nations agree to the referral. Somewhat surprisingly, Canada agreed to the Cabin Creek referral, which set off a multi-year environmental study (Clark et al. 1988).

The IJC's Cabin Creek mine decision amounted to a complete victory for Montana and Glacier National Park. Finding a violation of the Boundary Waters Treaty's pollution provision, the IJC recommended against approving the mine proposal until "potential transboundary impacts ... have been determined with reasonable certainty and would constitute





Upper photo: The ridge in the background is the proposed site for the Cline Coal Mine in the Canadian Flathead. Lower photo: An aerial shot of the nearby Elkview Mine. The impacts of the proposed Cline Mine would be comparable. Photos courtesy of Erin Sexton / Flathead Basin Commission.

a level of risk acceptable to both Governments" (International Joint Commission 1988). Noting the U.S. efforts to protect the Flathead basin, the IJC also recommended that "the Governments consider, with the appropriate jurisdictions, opportunities for defining and implementing compatible, equitable and sustainable development activities and management strategies in the upper Flathead River basin." But this recommendation—an explicit invitation to engage in a meaningful multi-jurisdictional dialogue over the future of the Canadian Flathead and its relationship to the larger regional landscape—has unfortunately never been implemented.

Another IJC referral, however, seems quite unlikely. The State Department has already deferred such a request by Montana's governor, explaining that it will continue to monitor the matter while Montana and British Columbia seek a local resolution (Jamison 2005b). There is little present likelihood that Canada would agree to another IJC referral. The Canadian and British Columbia governments are still unhappy over losing the earlier Cabin Creek mine referral, while Canada and the United States are at loggerheads over several high-profile issues, including the Devil's Lake water allocation controversy, and U.S. embargoes on Canadian cattle and softwood timber. As a result, these mineral development issues are being addressed at the state–provincial level and not at the national level.

Negotiations between Montana and British Columbia officials have thus far yielded few substantive results. After an unusual September 2005 personal meeting between Montana's governor and the British Columbia premier (no such high-level meeting had occurred during the 18 years since the IJC's Cabin Creek decision), British Columbia officials announced that the Cline coal mine proposal would undergo an environmental assessment and include the state as a cooperating partner. Exactly what this environmental review will entail remains to be seen.

Meanwhile, opponents have continued pressing British Columbia to do a comprehensive regional environmental study before permitting any mineral development activities within the Flathead drainage. They are seeking to generate enough political pressure to force Canadian federal involvement in the matter or an IJC referral, and to forestall corporate interest in the region. But if international energy prices remain at high levels, these efforts may be for naught. In short, the Canadian Flathead portion of the regional ecosystem is not secure and faces real and immediate development pressures.

# Toward regionalism and coordinated management

Glacier managers continue to embrace regionalism as the primary long-term strategy for protecting the park's ecological integrity. The overall goal is to knit the entire Glacier region together as an entity with the park at the core of the larger ecosystem, primarily by creating transboundary management forums, institutions, or incentives consistent with the park's conservation objectives. Twenty years ago, Glacier officials were relying heavily on the park's international biosphere reserve designation to provide it with meaningful protection and to foster restraint from its national forest neighbors. But since then, the biosphere reserve concept has not had any measurable direct effect, and it was barely mentioned during our interviews this time.

In recent years, an array of other transboundary initiatives have surfaced in the Glacier area that offer forums where external threat issues might be addressed. These efforts include

the Flathead Basin Commission, a Yellowstone to Yukon initiative (Y2Y), the Northern Rockies Ecosystem Protection Act bill, the Crown of the Continent Managers Group, and the GNESA partnership. Each of these initiatives is designed to break down the traditional jurisdictional boundaries that impede rational management of wildlife and water systems. None has yet produced a major breakthrough, and it is doubtful that such organizational efforts will be central to the search for regional managerial integration.

To take one example, the 20-member Crown of the Continent Managers Group has endorsed collaborative ecosystem management and adopted "an ecologically healthy Crown of the Continent ecosystem" as its vision (Crown Managers Partnership 2006). But even after disavowing any intent to involve itself in management decisions or processes, the group was forced to abandon its initial project—development of a joint cumulative effects model—after the Flathead Forest supervisor opted out of the project, evidently fearing that the model could be used against the agency in domestic NEPA litigation. And it has so far largely ignored the region's most pressing transboundary resource management problem—energy development in the Canadian Flathead.

The hard fact seems to be that regionalism does not happen merely because it is a good idea or through creation of a formal group. Indeed, the most significant progress toward regional identity and management—the conception of the Rocky Mountain Front—has come about informally and de facto, and it stands in stark contrast to the limited achievements of the more formal regionalism efforts. No such success is yet discernible on either side of the border on the Flathead side of the park, where the concept of a region, even one as visible as the watershed of the Flathead River, has yet to take hold.

# A twenty-year assessment

Glacier has so far been spared each of the major threats we identified two decades ago. While the park is still at risk, things are not nearly as bleak as we anticipated from the perspective of the mid-1980s. This is especially true on the adjoining national forests where we have seen the emergence of what amounts to a de facto buffer on their lands that border the park. It also holds true for private lands on the east side, where a sense of regional identity is taking hold. Such positive developments are less evident on the private lands in the Flathead Valley and across the border in the Canadian Flathead.

What explains the striking differences in park protection and environmental sensitivity that we have observed over the past twenty years? Significantly, neither a formal realignment of boundary lines to create habitat-determined federal enclaves, nor establishment of regionally based managerial systems, account for the progress toward greater regional integration. Rather, the key is a pronounced shift in thinking and local management away from formal enclaves (such as the park and the forest) and toward the region seen as an integral ecological unit, in particular as the habitat needs of target wildlife populations.

Thus, how regionalization actually happens on the American landscape seems to be the product of a variety of interlocking and mutually reinforcing changes in the way business is really done. One important element has been a reduction in conflict between the missions of neighboring federal land managers, as reflected in the Forest Service's transition away from its historic commodity production orientation and toward wildlife, recreation, and other amenities. A second indispensable factor is the law and its enforcement, which has played a





Lake McDonald and Iceberg Cirque: part of the spectacular landscape of Glacier National Park. The last twenty years have seen a dramatic rise in environmental concern, both among land-managing agencies and the general public. Although new concerns have come forth in that time, the park has been spared the major threats that loomed in the mid-1980s. Photos courtesy of Glacier National Park.

pivotal role in promoting management across formal boundaries. Where strong laws apply, as on the two national forests adjoining Glacier, developments have been positive and incompatible uses are being channeled into environmentally benign locations. But where the law is weak or where there is a reluctance to invoke it, the perils of environmentally harmful activity remain high, as on private lands in the Flathead Valley and in British Columbia. A third important element promoting environmental protection has been the evolution of a local public that conceives its surroundings in regional terms. That has been the case on the east side of the park, where the ecologically defined image of a Rocky Mountain Front has come to be a central reality. The absence of any such cohesive community concept undoubtedly helps explains why no analogous progress has occurred in the Flathead Valley on either side of the border. The last, but by no means least, important factor in the fate of the region is the market. Where economic pressures are high, as for energy development in the Canadian Flathead and for private lands in the Flathead Valley, it is extraordinarily difficult to advance regional environmental protection goals.

When these four elements are in harmony, the prospects for ecologically rational management are good. Neither national park nor national forest managers can control these matters, and perhaps they can only marginally influence them. Yet it would seem vital for park managers to know that these are the primary forces that will determine their park's destiny, and to work with that reality.

Some specific strategic observations for park managers also follow from our twenty-year review of the Glacier situation. First, while some issues—like private land use in the Flathead Valley—may be too sensitive for overt park involvement, there is little reason for the park not to be outspoken on other issues—like the Canadian threats—where the political calculus is quite different. Second, regular engagement with adjacent land managers can pay dividends, as it did when the progressive Lewis and Clark supervisor was convinced to stop further leasing on the Front. Park engagement with the Flathead forest over the Canadian threats and perhaps some local land use issues might pay similar dividends. Third, park officials should not disregard the role of third-party advocates, who were key to preventing drilling at Hall Creek and to bringing the Flathead's timber program under control. Finally, even when formal regionalism institutions and endeavors pay few immediate dividends, park efforts to promote a sense of regional identity and integration with the public can only help advance park protection goals over time. In sum, the challenge of park resource protection requires both a long-term vision as well as calculated short-term strategic moves and interventions.

Ed. note: A more complete and detailed account of this study was published by the authors as "The Realities of Regional Resource Management: Glacier National Park and Its Neighbors Revisited," Ecology Law Quarterly 33, 233–311 (2006).

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