

Documentation Supporting Montana's Request for an IJC Referral for the Flathead Watershed

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Historic Involvement of the International Joint Commission

In 1984, acting on parallel requests from the Governments of the United States and Canada, the International Joint Commission undertook a review of the water quality and quantity implications of the proposed Sage Creek coal mine in the British Columbian Flathead. In its conclusions the International Joint Commission documented the international ecological significance of the transboundary Flathead watershed and unanimously recommended that the governments of Montana and British Columbia conduct the appropriate science and planning toward the "mutually acceptable use of resources."

In his March 14th letter, Premier Campbell stated that British Columbia has "extensive environmental information and a wealth of baseline data" for the transboundary Flathead. In 1984, the Province made similar statements to the IJC's International Study Board regarding the Sage Creek mine. The Flathead River International Study Board realized that such baseline information was lacking when it began addressing the impacts of the proposed mine. The Study Board had to rely on best professional judgment; data from other mines; and in many instances, the Board could not make an impact assessment because of the lack of data. Identified data gaps included, but were not limited to, concentrations of dissolved oxygen, abundance and diversity of aquatic invertebrates, fisheries spawning and rearing habitat and other biological characteristics of the watershed.

Over a decade later, the Province of British Columbia has initiated new plans for coal and coalbed methane development in the transboundary Flathead, while the 1988 recommendations of the IJC still have not been implemented and substantial baseline data gaps remain in the Canadian portion of the Flathead drainage.

Cumulative Effects and Baseline Data

A close study of the coal deposits in southeast British Columbia reveals that one large, relatively continuous coalfield underlies the entire headwaters and Canadian portion of the Flathead River drainage, and a large portion of the Elk River drainage, which flows into the transboundary Kootenai Reservoir. A series of independent, exploratory coal and coalbed methane projects, all targeting different areas of this coalfield, have arisen in the last few years. The disparate nature of the projects (different companies, permits and locations) has prevented any analysis of the cumulative impacts of these developments. Several examples provided below document instances where comprehensive baseline data has not been collected prior to ground-disturbing activities in multiple separate projects. If significant ground-disturbing activities commence prior to baseline studies, the opportunity to monitor resource changes, identify impacts and mitigation strategies, and compliance with the Boundary Waters Treaty will have been lost.

According to an independent report solicited by the Province in 2004 to assess the existence of baseline environmental data in the Elk and Flathead valleys, there is very little water quality data available for the low-order streams that could be considered for the discharge of CBM wastewater, or for any industrial effluent resulting from coalfield development. According to the report: “This is a potentially critical information gap and baseline water quality monitoring will very likely be needed for at least three years before CBG (coalbed gas) development.”¹

In 2003, a second independent inventory of existing baseline data in the transboundary Flathead was conducted for the area specifically overlain by the Dominion Coal Blocks (DCB). This research was conducted in anticipation of a future transfer of the DCB from federal to provincial ownership. One third of the larger, southern coal block is in the transboundary Flathead drainage.

The report concluded that, “information about species-at-risk have been identified as a knowledge gap.”² Specifically, the report verified the confirmed occurrences of species-at-risk in the DCB, such as bull trout, fisher, grizzly bear, wolverine and Rocky Mountain bighorn sheep. Despite these confirmed occurrences, very little inventory or comprehensive habitat research has been conducted. Specifically, the report states,

*“No specific botanical surveys appear to have been conducted on the DCB, nor have there been any systematic studies of birds, mammals, amphibians, reptiles or insects. Most of the species occurrences compiled for the DCB are anecdotal records from licensed guide outfitters and trappers...”*²

The issue of cumulative effects was explicitly raised by Bill Bennett, southeastern British Columbia’s Member of the Legislative Assembly (MLA) in a letter to constituents in the Elk Valley. In his discussion of a proposed new coal mine in the Flathead Valley, Bennett wrote:

*Such a development could also have a detrimental impact on the tourism economy and public recreation in the Flathead. The coal operations in the Elk Valley have proven that they can operate without damaging water, but there is still the issue of “what is enough” resource extraction in one relatively small area, and the cumulative impact on land and water.*³

Since then, British Columbia has proceeded with additional coalfield development projects without addressing Bennett’s issue of cumulative impacts or the question of “what is enough.”

¹ Summit Environmental Consultants, March 31, 2004. Summary of existing baseline water quality data. Prepared for the British Columbia Ministry of Energy and Mines.

² Ecodomain Consulting, November 20, 2003. Species at Risk Inventory Strategy for Dominion Coal Block. Prepared for Natural Resources Canada, Canadian Forest Service.

³ MLA Bill Bennett letter to Elk Valley Mayors and other stakeholders, April 26, 2004.

Provincial Regulatory Framework

In order to regulate coalbed methane, in 2004 the Province cancelled their wastewater discharge permit process in favor of a regulatory feedback loop whereby industry is the primary enforcer. In place of the discharge permit, a new Code of Practice will govern CBM wastewater (“Code of Practice for the Discharge of Produced Waters from Coalbed Gas Operations”). The Code has never been released in full for public review and has yet to be promulgated, despite four years of coalbed methane pilot production in the region. Individual permitting systems represent the highest level of environmental protection, while the generic Code of Practice provides less ability to respond to site-specific needs, such as those in the transboundary Flathead.

In January 2005, West Coast Environmental Law (WCEL) released a review of the proposed Code of Practice. They outlined a suite of concerns, emphasizing that it does not provide for a precautionary approach appropriate for an industry as new as coalbed methane. Although the Code does state that baseline monitoring is a stipulation of development, it is not required at a comprehensive level or for sufficient time prior to activity. WCEL also raised concerns about the scale of monitoring on a site-specific basis, which fails to address the inherent density and magnitude of the CBM industry. According to the review:

“The scale of monitoring has not been linked to the scale of the proposed development. If dozens or even hundreds of CBM wells will likely be planned (as is necessary for commercially viable production) baseline data should be conducted on a watershed or even a regional level, since impacts will occur on this level.”⁴

The January 2005 British Columbia Mining Plan dictates that mining activity can supercede all other land-use considerations. The Plan creates a “two-zone” land use system that is confirmed in legislation and clearly defines that eighty five percent of provincial lands are open to mineral exploration, which includes most of the Canadian Flathead. The Plan further states that, “new land use plans recognize the compatibility of exploration and future mining activities with sensitive ecosystems, tourism and recreation values,” an *a priori* assumption that disregards actual values and potential impacts within the region. Provincial officials are given complete authority over mining decisions.

- **EnCana Greenhills Coalbed Methane Pilot Project (2001-2004)**

The EnCana wells are the only coalbed methane pilot project in southeast British Columbia and represent the Province’s first effort at CBM production in the region. One of the primary challenges to successfully producing coalbed methane is the inherent production of large volumes of wastewater that must be pumped up and disposed of, in order to produce the coalbed methane. This wastewater issue has resulted in substantial environmental management challenges that have not yet been overcome in the producing CBM basins of the United States, despite nearly thirty years of production.

⁴ West Coast Environmental Law. January, 2005. Comments on the BC Ministry of Water, Land and Air Protection’s Coalbed Methane Produced Water Code of Practice Intentions Paper. p.3.

Given the internationally recognized fisheries and water quality of the Elk and Flathead rivers, management of this new industry is of great interest to citizens, stakeholders and managers on both sides of these transboundary watersheds. In 1988, the IJC recommendation against the coalmine was largely based on potential detriment to transboundary fish populations, and scientific uncertainty around the impacts.

EnCana received a wastewater discharge permit in 2001 and began discharging CBM wastewater into a tributary of the Elk River. The Province permitted the discharge without legally enforceable standards for water quality in place, and without prior collection of comprehensive baseline data for the receiving stream, two absolutely critical safeguards for ensuring environmentally responsible management of the industry.

An independent review of the EnCana water quality concluded that the treated wastewater exceeded the standards and trigger values for several different parameters. The wastewater consistently failed the fish bioassay tests, often resulting in 100% mortality. According to the report, “The trout bioassay tests on water samples from the west pilot consistently resulted in 100% mortality rates between 48 and 96 hours of testing.”⁵ The mortality was attributed to very high ammonium levels, which pose a threat to the entire food web of the receiving watershed. Despite this, surface discharge was permitted for a three and a half year period with no action taken on the part of the Province when water quality exceeded the standards, trigger values and failed toxicity tests. In this pilot case, the Province did not enforce their water quality standards.

- **ChevronTexaco Coalbed Methane Test Wells (2003)**

ChevronTexaco received permission to drill three coalbed methane test wells drilled in the fall of 2003. The sites are located in the Elk drainage, on the divide between the Elk and Flathead Rivers. The sites were leveled using a deep cut-and-fill method. Sub-alpine meadow habitat was completely cleared of all vegetation, resulting in large well sites of 120 meters by 120 meters in very steep, mountainous terrain. There was severe soil compaction at the site and the drilling company left it to sit for six months of spring and summer with no rehabilitation or revegetation.

Rehabilitation did not commence until community groups filed a direct complaint with the Canadian coalbed methane industry association, and by then high precipitation had caused substantial run-off of muddy sediments draining into trout-bearing headwaters tributaries of Bray, Matheson and Morrissey Creeks. A previous inquiry to the Oil and Gas Commission resulted in no action. The Province failed to enforce its regulations with respect to removal of all waste materials from the site and “restoration of the land as closely as is reasonable to its original condition.” The Province has provided no evidence that habitat, wildlife or water quality baseline data was collected prior to the clearing and drilling of these well sites.

- **Cline Mining Corp. Foisey Creek Exploratory Coal Mine (2004)**

Most recently, the Province issued an exploratory permit authorizing the removal of 2,000 tons of coal from the Foisey Creek headwaters of the transboundary Flathead. Road building activity

⁵ Meridian Environmental Inc., February 25, 2005. Water Quality Review, Greenhills Coalbed Gas Pilot Project. Submitted to EnCana Corporation.

and excavation has been initiated in an area that is known to have critical grizzly bear, mountain goat and bull trout habitat, without prior collection of terrestrial or aquatic baseline data. Foisey Creek is anecdotally reported to be a significant spawning tributary for bull trout, but the appropriate population and distribution research has not been conducted to confirm this. In addition, comprehensive water quality and macroinvertebrate monitoring has not been conducted to document the existing baseline.

April 2005 Crown of the Continent Synthesis Workshop

In April, 2005, a group of 37 scientists and resource managers from Alberta, British Columbia and Montana collectively identified baseline data for the B.C. Flathead as a critical information gap. The diverse group of experts clearly identified the transboundary Flathead as a region of exceptional biological diversity, lacking fundamental baseline data about fish, wildlife and waters that might be affected by coalfield development. This finding is contrary to recent Provincial claims of having a “wealth of baseline data.” Despite these uncertainties, British Columbia has initiated plans to promote aggressive coal and coalbed methane development in the region without the IJC recommended bi-national cooperation, planning and science.

A Legacy of Protection on the U.S. side

The upper Flathead River Basin of British Columbia and Montana is recognized as one of the most ecologically intact drainages in the world. It is unique for its high-quality air and water, which in turn support abundant transboundary wildlife and fisheries. The sustained ecological integrity of the transboundary Flathead is largely dependent upon the combined stewardship efforts of both countries. According to the 1988 IJC International Study report,

“No other neighboring jurisdiction has established as demanding a level of environmental quality requirements as the United States and Montana governments have set for the North Fork Flathead River”⁶

In 1932, Waterton Lakes National Park and Glacier National Park were designated as the world’s first International Peace Park to commemorate the peace and good will that exists between the U.S. and Canada. In 1976 and 1969 respectively, Glacier National Park and Waterton Lakes National Park were each designated World Biosphere Reserves by UNESCO. In 1995, a further recognition was bestowed on the region when the Waterton-Glacier International Peace Park was designated as a World Heritage Site.

Federal designations on the U.S. side include Glacier National Park and Wild and Scenic River status for the Flathead River. The region also includes six species protected under the Federal Endangered Species Act, all of which range across the international boundary. Under the Federal Clean Air Act, the State of Montana has designated the North Fork of the Flathead River as having Class A-1 waters, the state’s highest water quality value.

⁶ Impacts of a Proposed Coal Mine in the Flathead River Basin, Board Supplementary Report. International Joint Commission, 1988.

The transboundary Flathead is also the heart of the Crown of the Continent eco-region where over 3.2 million acres are protected by U.S., Canadian and Provincial laws. The Crown is profoundly and globally unique as four major ecosystems converge in this area. For this reason, the Crown has the highest number of terrestrial carnivore species found anywhere in North American and has been identified for its richness of diversity of flora and fauna.

The Montana Legislature created the Flathead Basin Commission in 1983 to ensure the long-term integrity of the water quality, natural resources and environment of the Flathead Basin. At the local level, citizens have implemented land-use plans, zoning ordinances and private land conservation projects, all of which emphasize fish and wildlife conservation, preservation of open space and water quality protection.

Most recently, the Montana Legislature passed a Joint Resolution (SJ7) through the Senate and House recognizing the importance of the transboundary Flathead region and urging the Governor of Montana to negotiate an agreement with the Government of British Columbia, ensuring the long-term integrity of the transboundary region. The resolution also requests that the International Joint Commission conduct a complete environmental assessment prior to coal or coalbed methane development in the Flathead River watershed or adjacent environs.

Finally, the Bush Administration has recently supported the concept that we need to proceed cautiously with fossil fuel development in the 10-million-acre Crown of the Continent region, which includes the transboundary Flathead. An executive decision was made last spring to place a moratorium on oil and gas development on Montana's Rocky Mountain Front until 2007. At that time, the BLM will conduct a landscape-scale, comprehensive environmental impact assessment on the potential implications of industrial energy development on the Rocky Mountain landscape. Based on the assessment, a decision will be made on how to proceed, or whether to proceed with oil and gas development on the Front.

In canceling all new permitting for oil and gas wells in the Rocky Mountain Front, the Bush Administration supported the notion that some landscapes may be too ecologically valuable to industrialize for energy production, and at the very least, a precautionary approach is appropriate to determine what the impacts may be before proceeding with exploration or development in the region. The same approach is appropriate for southeast British Columbia in the same region.