

FLATHEAD BASIN COMMISSION REQUEST FOR LEGISLATIVE APPROPRIATION

January 12, 2006

British Columbia is currently considering the approval of the proposed Cline coalmine in the headwaters of the Flathead Basin. Based upon preliminary data provided by the Canadians from a similar coal mining operation in the Elk Valley in British Columbia, extremely high levels of nutrients, sediment and selenium would be introduced into receiving waters downstream from the a Cline coal mine operation. Therefore, if the Cline mine is approved, water quality in the Flathead River, including Flathead Lake will be adversely impacted, and such impacts would probably be evident in the Clark Fork Basin in Montana—and may even be seen downstream in Lake Pend Oreille, Idaho.

To address this pressing transboundary issue, Montana and British Columbia have been working to develop a water quality monitoring program to address the data deficiencies identified by the International Joint Commission in its 1988 report on the proposed Sage Creek Coal Mine. Currently, the protocol being developed by the MT/ BC negotiators calls for a minimum of three years of baseline data to establish existing water quality, macroinvertebrates, periphyton, fish and riparian habitat conditions and then to continue monitoring water quality at selected sites.

The Canadian commitment to monitor water quality hinges, in a large part, upon Montana's commitment on the U.S. side of the border. Therefore, it is absolutely critical for the FBC and Montana to commence water quality and other relevant monitoring in a timely fashion on our side of the border if we are to have continued credibility in our negotiations with British Columbia.

FBC is requesting \$308,477 for the biennium for three activities:

- (1) Water Monitoring: (\$183,477).¹ Monitor water quality and continuous flow for two years at 8 sites related directly related to the proposed Lodgepole coal mine in B.C. Total cost estimates for monitoring for the biennium would be \$565,050 of which Montana and British Columbia would both pay \$183,477. The U.S. Geological Survey would provide a 1:1 match or payment of \$198,096 for those stations it has responsibility.
- (2) Operational Budget: (\$25,000). Ensure that adequate travel and other operational funds are in place so that Montana can fully participate in the Canadian environmental assessment processes for coal mining applications and implementation of the BC/MT Action Plan ; and
- (3) Tranboundary Environment Specialist: (\$100,000). Hire a full time Hydrologists/Coordinator for the biennium to cover salary, benefits and operational costs. This person would collect and analyze data and coordinate the functions of Montana's involvement in the B.C. regulatory process and implementation of the BC/MT Action Plan.

¹ Costs for the first year of monitoring would total \$93,051 due to equipment installation expenses, while costs for the second year would be slightly less at \$90,426.

Although many agencies in the Flathead Basin currently monitor various water quality parameters, none of these agencies are charged with monitoring impacts associated with coal mining operations north of the Montana border. Therefore, new water quality monitoring stations and protocols are needed to capture baseline conditions on the ground. Time is of the essence as the Cline mine application is currently pending, and once such a mine becomes operational, the opportunity for collecting baseline conditions will be lost. In addition, the data obtained from this transboundary water quality monitoring effort will be incorporated into FBC's basin-wide water quality monitoring plan currently being developed with the assistance of both federal and state partners, including the Flathead Lake Biological Station.

Operational funds including travel funds are required to ensure Montana's continued participation in British Columbia's coal mining regulatory processes and to complete the negotiation and implementation of an approved Action Plan.

The tranboundary specialist would have a number of important duties. The specialists would coordinate the water quality monitoring effort; generate and coordinate comments on the mine company's Terms of Reference, the mine application, and the Provincial Environmental and Canadian Federal Environmental Assessments; and to assist Montana negotiators with the finalization and implementation of the pending Action Plan between Montana and British Columbia.

The request of \$308,477 is in addition to the Governor's request for DNRC state appropriation for the FBC. The FBC budget for FY 2008 & 09 will be based on FY year 2006 budget expenditure of approximately \$57,829/year. FBC's EPP proposal is an increase in operational costs of \$19,800 for the biennium. These funds would cover items that were originally covered by the Governor's Office when FBC was administratively attached to that Office, including computer equipment, rent, utilities, supplies and both domestic and Canadian travel costs.

BACKGROUND DOCUMENTATION FOR LEGISLATIVE APPROPRIATION

Water Quality Monitoring:

To obtain scientifically reliable baseline conditions, Montana/BC will need to either install or continue to monitor stream flows and collect water quality samples at eight sites downstream of the Cline mine. Three of the monitoring stations are on the U.S. side of the border: Flathead River (North Fork) at the International border; Flathead River (North Fork) at confluence with Middle Fork of the Flathead River; and Flathead River at Columbia Falls. At each of these monitoring stations, all water parameters that could be impacted by the proposed coal mines would be measured, including but not limited to: fine and deposited sediments, specific conductance, TDS, total alkalinity, Chlorophyll a, hardness, all relevant cations and anions, sulfide, sulfate, carbon, pH, dissolved oxygen, temperature and the full suite of nutrients and metals. Again, to ensure scientific reliability, the monitoring protocol must include a minimum of seven samples per year for each of the water quality parameters, with the exception of sediments and temperature, which must be measured more frequently in the spring, summer and fall.²

In order to maximize our requested legislative appropriation, FBC would work with the U.S. Geological Survey to undertake a significant portion of the monitoring effort (continuous flow and water quality), since USGS will provide a 1 to 1 federal match for those stations that it has responsibility for. However, the Flathead Lake Biological Station would be responsible for sampling macro invertebrates, periphyton and channel characterization given their expertise in this area. DNRC would measure flows in the British Columbia tributary streams north of the border. This transboundary monitoring effort would be a small part of FBC's coordinated basin-wide monitoring.

Montana and British Columbia's would both pay an annual cost for monitoring as follows:

\$ 49,526 paid to the USGS
\$ 3,772 paid to DNRC
\$ 32,130 paid to the Flathead Lake Biological Station
\$ 85,426 per year

The USGS would provide a 1:1 match or cost share of \$99,048/per year (will match both British Columbia and Montana) or \$198,096 for the biennium.

Montana's biennial requests:

Continuous water supply and quality monitoring per biennium \$ 170,852
One-time equipment costs for DNRC continuous flow data:³

² Samples would be collected twice during the rising limb of the hydrograph, at peak discharge, twice during the falling limb of the hydrograph, during late summer base flow conditions (August or September), and base flow before spring breakup or freshet. If a large storm event occurs that increases flows, additional sampling should also occur. Fish, benthic and periphyton sampling would also be undertaken.

³ DNRC would undertake seasonal sample at the mouths of Lodgepole Creek downstream of the proposed mine, Foisey Creek and McLatchie Creek.

\$1,750 per site x 3 sites X 1/2	=	\$ 2,625
Additional sampling as needed based on storm or other unique events:		\$ 10,000

Total biennial sampling costs \$ 183,477

Although water quality monitoring throughout the Flathead Basin is a priority for many state and federal agencies, including MT DEQ, MT DNRC, MT DFWP, Glacier National Park, USGS, and the Flathead Lake Biological Station, none of these agencies or organizations are specifically charged with water quality monitoring related to downstream impacts from B.C. coal mining operations. The only way to capture the baseline data is to fund it.

Participation in British Columbia’s Regulatory Processes:

FBC, along with the Governor’s three person negotiating team and selected scientists from DEQ, DFWPs and the FLBS must travel to and from Canada during the next two years to:

- (1) Finalize and begin to implement the Action Plan with British Columbia;
- (2) Participate in the Terms of Reference for the proposed Cline and Liliburt mines, as well as any other coal mining applications filed subsequent to this request;
- (3) Participate in the Canadian federal and British Columbia environmental assessment processes for each of these mining applications;
- (4) Coordinate transboundary water quality monitoring protocols and sampling efforts; and
- (5) Collect water quality and other types of macroinvertebrate samples.

Costs to participate in the B.C regulatory process for two years would total approximately \$25,000. Cost breakdown is as follows:

Average trips per year:	3-5
Average # of persons per trip:	5-7
Costs: airfare for the year:	\$7,500
Carfare for the year:	\$1,300
Lodging:	\$2,700
Meals:	<u>\$1,000</u>
	12,500/year

Total biennial travel costs = \$25,000

Tranboundary (Environmental Impact) Specialist:

The FBC requires one full-time tranboundary environmental specialist or hydrologist to organize and facilitate the water quality monitoring program on both sides of the border, including but not limited to assuming the role of coordinator with and between the following entities undertaking baseline monitoring related to the proposed B.C. coal mines, including USGS, DNRC, FLBS, and their counterparts north of the border.

However, the transboundary water quality monitoring is a small part of the larger, basin-wide baseline assessment effort. Therefore, this person would also coordinate with all other entities undertaking water quality monitoring in the Flathead Basin, including but not limited to: CSKT, DEQ, DFWP; NPS; USEPA; USFWS; USBR; USFS; Flathead and Lake County Conservation Districts and appropriate county government departments; PP&L; BPA; and relevant NGOs and consultants. The need for such coordination in the Flathead Basin cannot be over stated, and will assist in eliminating duplicative efforts, increasing efficiency and leveraging funds for an integrated and seamless water quality monitoring program, the results of which can be used to assist decision makers at both the state and local levels.

In addition, the transboundary specialist would also work on providing comments regarding the proposed Cline and Lilliburt Terms of Reference, Provincial Environmental Assessments and Canadian federal Environmental Assessments, as well as any new mine applications filed in the transboundary Flathead in the next two years. As part of this process, the transboundary specialist would develop relationships with stakeholders north of the border to ensure that our concerns on mine applications are not unilateral in nature.

Finally, the transboundary environmental specialist would assist the Governor’s 3-person negotiation team facilitate, coordinate and implement the terms of BC/MT Action Plan, and work with our Canadian counterparts to enhance communication and encourage information exchange on all issues impacting natural resources in the Flathead and Kootenai River Basins.

Total biennial personnel costs = \$100,000 (incl. benefits and operational costs)

TOTAL BIENNIAL BUDGET REQUEST:	
Water quality monitoring:	\$183,477
Travel:	\$ 25,000
Transboundary Specialist:	\$100,000
Total	<u>\$308,477</u>

Outputs – Two years of baseline monitoring, report summarizing monitoring efforts and data entered into storet database accessible to the public and all governmental agencies, BC/MT Action Plan (anticipated), and comments generated by FBC on all phases of B.C. mine regulatory processes.

Outcomes – Short and intermediate term outcomes include obtaining the baseline data needed to address the impacts of coal mining proposals north of the border, and laying part of the foundation for the Basin’s long term monitoring effort. Long term outcomes include greater protection of the Basin’s water quality and other natural resources, along with laying the foundation needed for standing in the event that legal action is necessary.

Timeline

- 2007 Finalize monitoring plan and commence year 1 monitoring. Hire transboundary specialist, continue to negotiate and implement Action Plan and participate in coal mine application environmental assessment processes.
- 2008 Undertake year 2 years of monitoring and continue efforts started in 2007, and participate in all processes related to mining applications and the implementation of the Action Plan. Compile monitoring results.⁴

It is important for FBC and Montana to demonstrate that we are investing in water quality monitoring on our side of the border in order to obtain scientifically acceptable baseline data, as well as to encourage the Canadians to undertake similar monitoring efforts on their side of the border. Therefore, it is critical that we obtain the necessary levels of funding to implement water quality monitoring to ensure that one of our most precious natural resources – clean water and the protection of Glacier and Flathead Lake – are adequately protected.

⁴ In order to obtain 3 years of baseline monitoring data, FBC may need to ask the legislature for an appropriation for year 3 monitoring costs during the 2009 legislative session.