

Coal mining threatens Vancouver Island water resources, and the industries that depend on them

Looking west from the towns of Comox and Courtenay, the skyline is dominated by the iconic Comox Glacier, source of the streams that feed Comox Lake which, in turn, provides much of the Comox Valley's drinking water. Fish-bearing rivers and streams irrigate fields and orchards on their way to Baynes Sound, home of the world-famous Fanny Bay oyster industry. Water is key to the ecological and human well-being of this Vancouver Island region and the success of its sustainable industries — shellfish aquaculture, tourism and fishing.

Compliance Coal Corporation plans to dig out 30 million tonnes of coal over 16 years from its proposed Raven coal mine near Fanny Bay. The coal would be trucked along a narrow, winding highway to Port Alberni and loaded onto ships bound for Asian markets. To accommodate coal exports, the port facility at Port Alberni would be dredged and deepened to allow access to large Panamax-type vessels. In addition to the Raven mine in Fanny Bay, Compliance plans to develop the Bear coal deposit near Cumberland as an open-pit mine, and the Anderson Lake coal deposit near Strathcona Park.

The Raven Coal Mine Puts Shellfish Aquaculture in Baynes Sound At Risk:

- The mine will be located only five kilometres upstream from the Baynes Sound shellfish industry, with a toxic tailings pond situated over fish-bearing Cowie Creek.
- Waste water from coal mines, and run-off from slag heaps, typically contain many harmful toxins including heavy metals and polycyclic aromatic hydrocarbons (PAHs).
- Shellfish are filter feeders and need clean water to survive as they filter out nutrients

from the water. If PAHs and heavy metals enter Baynes Sound, the shellfish will consume and store these harmful compounds.

- Very small increases in pollution can make Baynes Sound shellfish unfit to eat, wiping out the \$28-million sustainable shellfish industry and the 600 jobs that come with it. The B.C. Shellfish Growers Association is strongly opposed to the Raven coal mine.

Because of the sensitivity of shellfish to minute changes in water quality, they have long been used by scientists as a first indicator of water pollution — the proverbial “canaries in the coal mine”. In this case, the canary is a booming shellfish industry with promising growth potential, one that will provide Comox Valley jobs for many generations into the future. Do we really want to risk an environmentally-friendly industry to promote a coal mine that would be gone in less than 20 years?



Fanny Bay oysters are a sustainable, world-renowned delicacy.

An Economic Boon?

Far from boosting the local economy as the proponents claim, a recent cost-benefit study by Dr. Joan Kuyek shows that the Raven coal mine would negatively impact existing economic activities, and depress property values and local government revenues, while creating very few jobs for local residents.¹

A Dirty Industry

Coal contains a number of toxic elements, including mercury, arsenic, lead, and other toxic and cancer-causing substances. Coal crushing, processing and washing releases tonnes of particulate matter and chemicals that can contaminate water, harming ecological and community health. Surface runoff can carry toxic compounds from tailings pond and slag heaps into local streams, rivers, lakes and groundwater. This process, called acid mine drainage, is one of the most serious environmental threats posed by mining. It can potentially render drinking water unsafe, contaminate groundwater and destroy fish habitat. The impacts can continue for centuries, and cost millions of dollars to remediate.² The salmon and trout in Cowie Creek, the Tsable River, Hindoo Creek and Wilfred Creek are at serious risk from run-off pollution from the Raven mine.

Dredging the Port Alberni harbour would disturb toxic sediments from four decades of pulp milling, releasing their load of dioxins, furans and PCBs into the marine environment. The resulting pollution of the Somass estuary and inlet — a major migration corridor for salmon — would have far-reaching effects on the First Nations food fishery, tourism and the sports fishing industry in the whole region.

Been There, Done That

Comox Valley residents have witnessed the impact of previous coal mines, and know what's at stake. Older residents still recall the damage to the salmon stocks of Trent River from the historic Cumberland coal mine. The waste rock piles of the Tsable River mine, shut down in 1966, are still there to be seen, as is the orange-coloured runoff in the Tsable. Just over an hour's drive north, the still-operating Quinsam coal

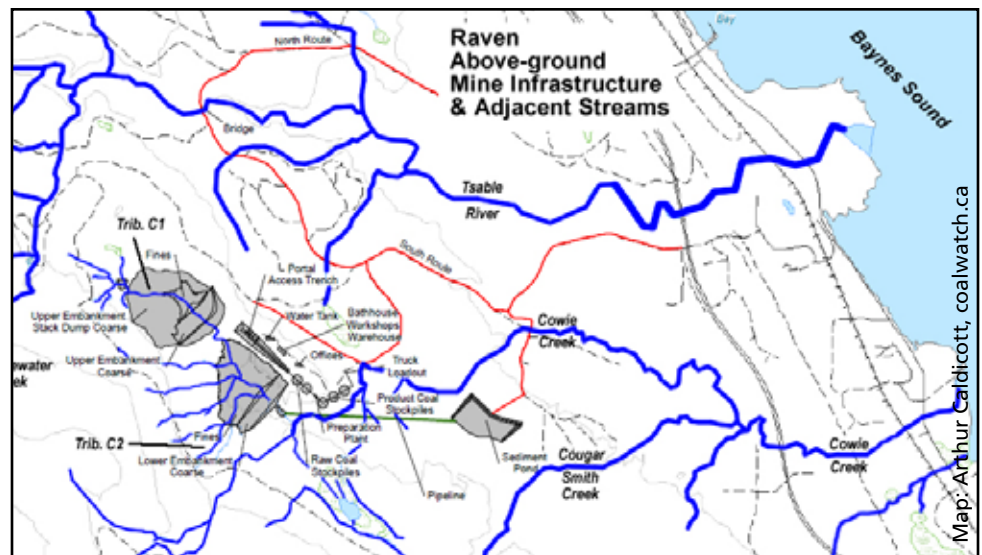
mine near Campbell River has caused elevated arsenic concentrations in Long Lake as a result of acid rock drainage and other chemical processes associated with mine waste, according to a University of B.C. study.³

This time around, most residents of Courtenay, Comox and Port Alberni are making a different choice. The dirty business of coal mining no longer fits the Comox Valley's role as a hub for year-round tourism, which is increasingly expanding into emerging tourism markets such as agri-tourism and cultural tourism. A convoy of coal trucks 24 hours a day through the scenic Alberni valley and downtown core is at odds with Port Alberni's much-vaunted image as the "ultimate fishing town". The growth strategy for both regional districts emphasizes protecting waterways and wetlands, water conservation and local food production, and recognizes the importance of shellfish aquaculture, including First Nations-run aquaculture operations, as a major employment driver — activities all incompatible with coal mining.

What You Can Do

The Raven mine is currently undergoing an environmental assessment, slated to be completed in 2013. Despite flaws in the process — including a lack of independent baseline studies and aquifer mapping, repeatedly requested by residents and local governments — the Raven mine is by no means a done deal. Sustained public pressure is key to protecting sensitive ecosystems, watersheds and community resources, as the successful campaign to ban mining in the Flathead River Valley of southeast B.C. shows.

To take action please visit www.sierraclub.bc.ca/raven. More information at www.coalwatch.ca.



1 <http://www.coalwatch.ca/there-may-be-better-ways-find-21-jobs>

2 http://www.coalwatch.ca/sites/default/files/MitigatingCommunityImpactsOfMiningOperations_Krindle-and-Tolliday_ELC_20Apr2012.pdf

3 An Environmental Investigation of the Quinsam Watershed, Dr. William R. Cullen and Vivian W.-M. Lai, UBC, April 2010