Can silver be mined safely from under a wilderness?

Colin Chisholm | Dec. 22, 1997 | From the print edition

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Thanks to President Clinton, you've probably heard of the New World Mine that was to be built near Yellowstone. And you may have heard of the proposed McDonald gold mine on the Blackfoot River near Lincoln, Mont. Thank Norman Maclean and his novel A River Runs Through It for laying the groundwork of concern.

But lacking a national park nearby, or an award-winning novel and movie to publicize its existence, the 93,000-acre Cabinet Mountains Wilderness has failed to achieve national or even Western visibility.

Local attention is another matter. For nearly 30 years, in this part of rural northwest Montana, a quiet environmental battle has been simmering between activists and two companies with mining claims on the east and west sides of the wilderness.

What's at stake is a precedent-setting use of wilderness lands. What could turn out to be the world's richest
silver and copper mine is located inside and adjacent to a designated wilderness area.

ASARCO's Rock Creek Mine would tunnel three miles underneath the little-known wilderness to extract some $2 billion worth of copper and silver ore. The ore would be milled in an industrial complex located just west of the wilderness boundaries on public lands alongside Rock Creek. This mine has not yet been permitted and is at the center of mining conflict on the east side of the Cabinets.

Permitted several years ago, on the east side of the Cabinets, is the underground Noranda silver and copper mine. Hampered by a lawsuit dealing with the validity of its mining claim, as well as by financial problems, the mine has yet to break ground. Nevertheless, Noranda is considered a done deal by many environmentalists.

Because of that, most local attention has focused on the ASARCO Rock Creek Project, which awaits permitting from the Forest Service. After the draft Environmental Impact Statement (draft EIS) drew over 2,000 public comments, the agency went back to the drawing board to create a supplemental EIS, due Dec. 22 of this year.

Water quality is the crux of the issue. For 25-30 years, 2,500 gallons per minute of groundwater will flow into the underground Rock Creek mine, picking up ammonia and high levels of nitrates, as well as copper, silver and other heavy metals. While some of this inflow will be used in the mill, the bulk of it will be treated and discharged, via a pipeline, into the Clark Fork River. ASARCO is confident its technologies will work, but community activists are concerned that the primary and secondary treatment procedures - anoxic biotreatment cell and "reverse osmosis" - are unproved for high-volume mining applications, and that water downstream will suffer.

Water quality is of crucial importance at Rock Creek because the drainage is a vital part of Montana's bull trout recovery hopes. The state has pledged to protect the soon-to-be-listed bull trout through the efforts of

ASARCO plans to build a five-mile-long pipeline to carry the treated water downstream to a tailings impoundment alongside the Clark Fork River, thereby, it says, bypassing and eliminating any threat to Rock Creek and its bull trout. ASARCO has also petitioned the state to have Rock Creek delisted from its threatened stream designation.

Diane Williams, the Idaho coordinator of the nonprofit Rock Creek Alliance, disagrees. Her group believes that contaminated water will inevitably reach Rock Creek through groundwater or leaks in the pipeline.

"Here you have a mining company (ASARCO) whose environmental record shows 21 Superfund sites," Williams says. "Just up the road (at ASARCO's Troy Mine in Montana) you have ongoing lawsuits and environmental problems. Yet they expect the public to believe that this mine (Rock Creek) will be different."

Cesar Hernandez of the Cabinet Resource Group, another nonprofit, has concerns about containing tailings "on very questionable ground." The 300-foot-high, 340-acre impoundment is slated for an alluvial bed a quarter mile from the Clark Fork River, on Forest Service land. Hernandez says the entire tailings pile could "break loose, moving like a giant iceberg downstream." Testing to determine stability is currently being conducted at the site.

In addition, Hernandez is concerned that ASARCO has proposed a "wet" impoundment that uses no liner to stop leakage. An experimental "paste technology" - de-watered tailings with the consistency of wet concrete - has been used only for underground backfilling, not as a surface solution. It poses a problem because the tailings will eventually dry to the consistency of sand. "Sand," Hernandez says, "is subject to rain, snow, freezing, whatever. We all know what happens to a pile of sand when it's left out in the open - it moves. And in this case it will move either towards Rock Creek or towards the river ... or both."
Dave Young, ASARCO’s Troy spokesperson, disagrees. According to Young, "there is little to no chance the tailings pond will move at all - it will be as solid as any tailings impoundment present today." In regard to the lack of a liner, Young says that "liners give a false sense of security, and the high expense doesn't guarantee security."

**Don't forget grizzlies**

There is also concern about the grizzly bear population. According to Wayne Kasworn of the U.S. Fish and Wildlife Service, as of 1988 there were fewer than 15 grizzlies remaining in the Cabinet portion of the Yaak/Cabinets study area, and there is no data to suggest that the population was changed dramatically in the past ten years.

He says, "The mine is certainly going to occupy some grizzly habitat. With Noranda permitted, we have to deal with ASARCO as if the Noranda mine is already there. Those two mines - with five or six airline miles between them - would essentially create the potential for pinching off the entire southern end of the grizzly bear population."

While there is good evidence that the northern portion of the grizzly population is growing in the Yaak, Kasworn says it is "a serious situation" in the Cabinets. Approximately one-third of the Cabinet grizzly bear recovery area will be affected by the ASARCO project.

Finally, the credibility of the state's role in the permitting process has become an issue. The environmental consultants, OEA Research Inc. of Helena, which helped research the potential impact of the mine, last year accused state officials of distorting their scientific analysis in order to downplay the potential degradation. As a result, an approved errata sheet, which attempted to clarify language deemed misleading by the OEA
group, accompanied the draft EIS.

According to Paul Kaiser, the Forest Service's project coordinator, once the supplemental EIS is released this month, there will be a public comment period, at the end of which a record of decision will be released by December 1998. Says Kaiser, "Under perfect circumstances - if the project is approved, if the core samples prove substantial enough, if there are no lawsuits - the earliest the mine could begin operation would be sometime in 1999."

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