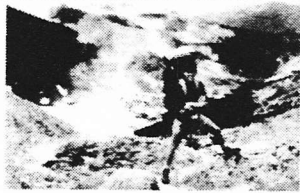


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DWIGHT HOLING is a freelance writer in Oakland, California.

## PUBLIC LANDS

### The Rush for Invisible Gold

*Poison ponds and a pitted landscape are left behind as miners extract the last bit of gold from western wilds.*

Craig McLaughlin

**G**OLD MINING HAS BEEN a fact of life in the California Desert since the 1780s, when Spaniards began working the Car-go Muchacho Mountains in the south-eastern quarter of the state. Now a modern gold rush, fueled by high prices and a new technology called heap leaching, is tearing up huge areas that were once unattractive to large-scale mining operations. By the end of 1988, the California Desert had nine active heap-leach operations, and four more in the permit process.

Elsewhere in the country, gold-mining activity is equally feverish. According to the U.S. Bureau of Mines, by 1987 there were some 150 heap-leach operations in California, Nevada, Alaska, Idaho, Montana, South Carolina, South Dakota, Utah, and Washington. Some of these mines use heap leaching to remove the gold from the abandoned tailings of old mines, but others might never have existed without the new technology.

Developed in the mid-1970s, heap leaching makes it economical for

mining firms to work ore that contains fewer than .03 ounces of gold per ton of rock. To reach this disseminated gold, miners excavate huge ore deposits, creating pits the size of football stadiums or larger. The crushed ore is then stacked in giant heaps, a cyanide solution is dripped through the heaps, and the solution—now "pregnant" with gold—is collected in ponds.

At one such mine—the Mesquite Project, run by Gold Fields Operating



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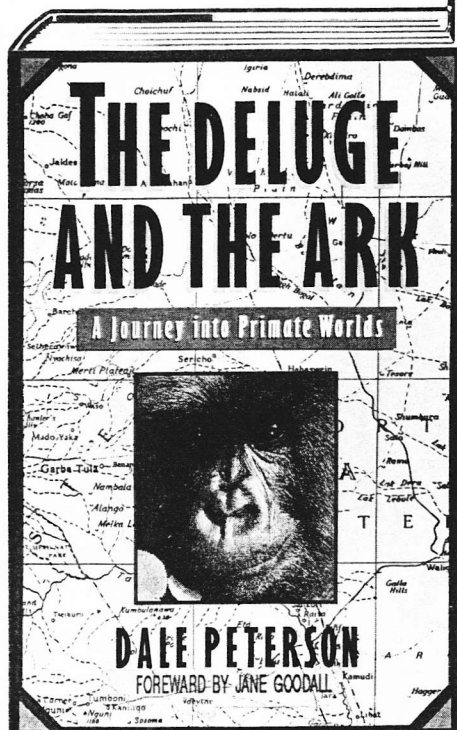
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Company in California's Imperial County—plans call for six pits, each 450 feet deep, and hundreds of acres of discarded rock piled 270 feet high. The pits would sprawl across about a quarter of the six square miles that would be disrupted by the project.

When the mine's operators leave after 20 years, they will not have to fill in the pits or level the discarded rock. The reason, explains mine manager Bob Filler, is that other technologies may be developed to remove even more gold from rock hauled out of the pits—and because backfilling would be too expensive.

**T**he new technology leaves behind more than an altered landscape. In Nevada, the state with the largest number of heap-leach operations, gold “collecting ponds” have been responsible for the deaths of more than 6,440 migratory birds in the past five years, according to a report released last April by The Wilderness Society. The roster of the dead also included deer, kit foxes, and coyotes.

The Wilderness Society report also describes several cyanide leaks, some of which have contaminated nearby water supplies. For example, in November 1986 a pipe containing cyanide wastewater ruptured at the Dee Gold Mining Company near Carlin, Nevada, contaminating water for about three miles.

The California Desert's dry climate poses another problem: Mines often compete with local wildlife for scarce water. In one case, developers of the proposed Castle Mountain Mine in the East Mojave National Scenic Area have suggested pumping 1,650 acre-feet of water from underground reservoirs. Critics charge the plan could threaten Paiute Springs, the area's only year-round stream.

A desert pockmarked with pits is a frightening vision for longtime desert activist Jim Dodson, a director of the California Desert Protection League, which comprises groups like The Wilderness Society and the Sierra Club. “There are old gold-working areas all over the California Desert,” he says. “If you take an aerial photograph of the

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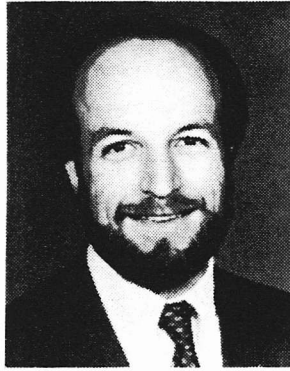
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Mesquite mine and superimpose that on any area where there are gold ore bodies, it gives you an idea of the potential impact."

How many new heap-leach mines will spring up in the next few years, and what toll they will exact from the desert, will depend largely on gold prices, new technologies, and the number of ore bodies discovered. Politics will also be a factor—at this point one working in the miners' favor. Most of the mines are on acreage cared for by the Bureau of Land Management, an agency that has shown itself to be a less-than-zealous environmental guardian when it comes to mining projects. For example, the BLM first attempted to approve the Viceroy Mining Company's Castle Mountain Mine without conducting the extensive studies required for an environmental impact statement. The proposed mine would disrupt more than a square mile of the East Mojave National Scenic Area. After some legal wrangling with environmental groups, the agency backtracked and now has a draft EIS in the works.

Dodson says the mine would be visible from much of the East Mojave: "In that kind of country, it doesn't take much to make an impact that other people have to share."

Filler, the Mesquite mine manager, insists that the BLM serves well as the lead agency on environmental issues. "We found it to be aggressive, in the sense that we had to cross all the t's and dot all the i's," he says.

Dodson disagrees. "The BLM seems to be trying to excuse business as usual," he says. If the agency is indeed requiring everyone to dot all the i's and cross all the t's, he adds, "it's a mighty short word."

The BLM's policies on heap leaching are governed by the agency's own congressionally mandated 1980 Desert Plan and by the federal Mining Law of 1872. The Desert Plan places few restrictions on land managers, and in fact encourages off-road-vehicle use, mining, livestock grazing, and energy development, along with conservation. The BLM could amend the plan. But

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with Cy Jamison—a one-time aide to former Interior Secretary James Watt—heading up the bureau, most observers doubt that changes unfavorable to the mining industry are likely.

The mining law also works to miners' advantage. Enacted to encourage exploration for much-needed minerals, the mining law is now being used by firms like British-owned Gold Fields and Canadian-owned Viceroy to plunder U.S. lands without paying the government a penny. Dodson says he considers repeal or modification of the law "one of the most pressing things on the environmental agenda." (See "What's Mined Is Theirs," September/October 1989.) A Senate Energy subcommittee held hearings last June on reform legislation (S.1126) introduced by Dale Bumpers (D-Ark.).

The proposed Desert Protection Act (S.11 and H.R.780) could affect gold miners, too, though much less dramatically than Bumpers' bill. The act would establish Mojave National Park and expand Death Valley and Joshua Tree national monuments, elevating them to national-park status. It would also designate 81 new wilderness areas, adding a total of 4.5 million acres to the National Wilderness Preservation System. Existing mining claims would be honored on all these lands. In fact, Viceroy's proposed Castle Mountain Mine would lie within Mojave National Park. The act would prohibit new claims in the protected areas, however.

The California Mining Association, working through an educational arm deceptively named the Desert Conservation Institute, is trying to turn public opinion against the Desert Protection Act. But even if the bill passes, much of the desert would still be open to exploration. And as long as gold prices remain high, the Mining Act of 1872 prevails, and the BLM stays on its present course, the large mining companies will continue to tear huge chunks out of the California Desert—leaving their messes behind them. ■

CRAIG McLAUGHLIN is the San Francisco Bay Guardian's projects editor.