

# Book Details High-Tech Industry's Water Exploitation

There are few sensations more invigorating than to sit barefoot on the banks of a river and feel the cold through your feet while listening to the waters rush by. To experience a river's spirit is sacred. It is a baptism from nature that has taken hundreds of millions of years to create.

And yet in a few short years, in parts of the world, life-sustaining waters that many people hold to be sacred are in danger of being completely contaminated and sucked dry by high-tech corporations — companies that were once considered to be part of a "clean industry."

In the cities, people take the water they drink for granted. They expect that every time the faucet is turned on, clean water will pour. But this may no longer be the case in the not too distant future.

In "Sacred Waters: Life Blood of Mother Earth," a new book from the Southwest Network for Environmental and Economic Justice and Campaign for Responsible Technology, the authors sound the warning that in our quest for faster and more powerful computers, we as a society are permitting industries to destroy our environments. Yet, it is not individuals that are allowing this to happen but local, state and national governments the world over, in their endless courting of businesses to secure jobs

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*Latino Spectrum*

and prosperity.

In "Sacred Waters," the authors document four case studies of "high-tech water resource exploitation and corporate welfare in the southwestern United States," including the Silicon Valley in Northern California; the Silicon Desert (Phoenix-area) of Arizona, the Silicon Mesa (Albuquerque-area) of New Mexico and the Silicon Hills of Austin, Texas.

The authors conclude that new jobs have indeed come to these areas, but many of them have gone to "outsiders" who have been brought in to work for these corporations, without any real benefit to these local communities. The book also concludes that the arrival of high-tech industries to these

areas has been very prosperous indeed — not for the communities, but for the companies themselves, such as Intel, Motorola, IBM, Sumitomo, and a host of other multinational corporations. What lures these migrant companies to water-starved regions — deserts, in some cases — has been long-term multimillion-dollar tax abatements, infrastructure support, a nonunionized labor force, extremely cheap water and lax enforcement of health, worker safety and environmental laws.

But the cost of creating more convenient forms of communication has been the contamination of water and a trail of toxic sites left behind. Industry experts estimate that in addition to chemicals and electrical power, it takes over 2,000 gallons of water to make a single six-inch silicon wafer. Of course, once used, the water is not reusable in chipmaking.

Projected net sales for the semiconductor industry alone for 1997 are \$154 billion. The authors argue that, with that kind of money, these businesses should clean up their own messes, rather than burdening consumers or taxpayers. They should also be good corporate citizens by paying their fair share of taxes rather than receiving corporate welfare in the form of massive tax breaks.

The silicon chip industry was, of course,

born in Northern California, which is today home to the most EPA SuperFund cleanup sites (29) in the country, 80 percent of them created by high-tech industries.

Rather than voluntarily cleaning up its mess, the industry's response has been to pick up and move — to places such as Arizona, New Mexico and Texas, where its pollution and depletion of water sources has continued unabated. It has also triggered destruction of a way of life for many. This is true not just in the United States but wherever subsidiaries of these companies exist and as the authors of "Sacred Waters" point out, that's everywhere in the world.

Some used to call this environmental racism because many of the affected communities in the Southwest are Chicano villages and Native American pueblos. However, these four case studies reveal that the insatiable thirst of these high-tech industries for water and profits is decimating entire regions, not just poor communities. It's true that the most highly polluted Superfund sites are generally in communities of color. However, the authors warn of an impending disaster that will affect all the residents of the Southwest. Once the industries suck up all the water and pollute it all, what are we as a society going to do?

The companies will simply move on, leav-

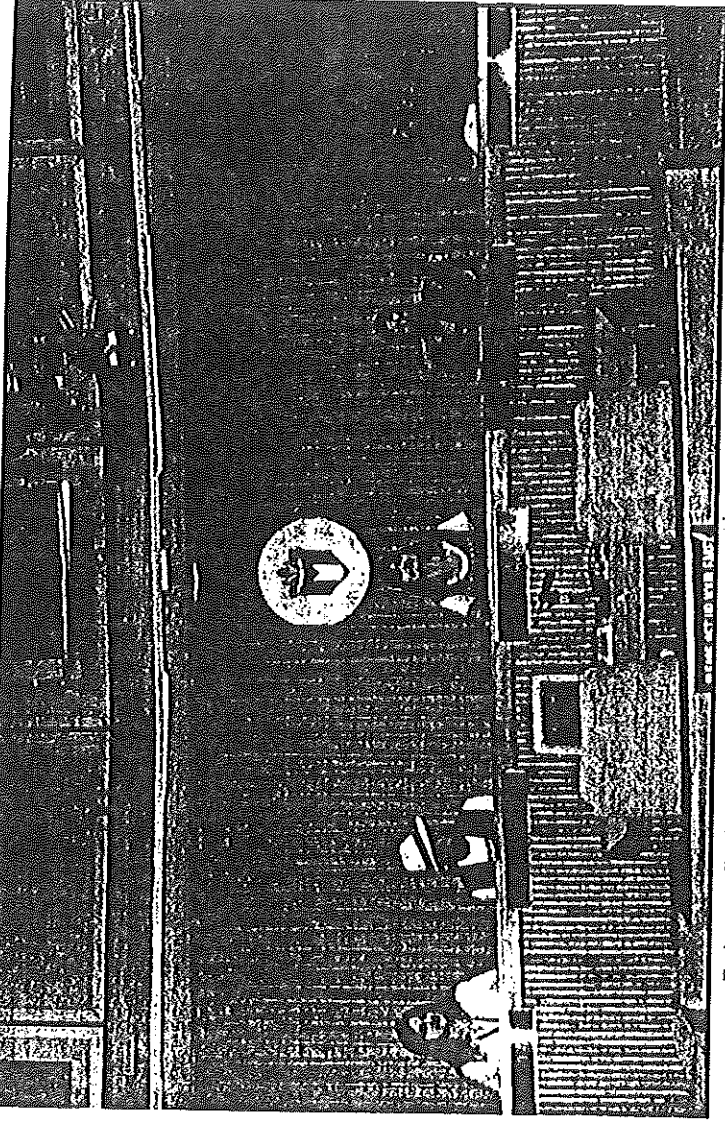
ing in their wake, water-starved communities and the decimation of local cultures. For example, the 300-year-old acequia (water irrigation) associations in rural New Mexico, whose purpose is to share and maintain the limited water resources equitably, are in danger of being dissolved as high-tech companies attempt to purchase more and more water rights to meet their own expanding needs. Once the acequia members succumb to financial pressures and sell their water rights, their farming way of life will cease.

"Sacred Waters" is not anti high-tech, but demands that industry and government create self-sustaining and non-polluting technologies. Because we only live on one planet, these corporations will one day run out of places to migrate to. That's why the authors speak of an impending international water crisis.

With this book, the authors have elevated the environmental struggle beyond questions of race, class, gender and equality. They now speak of the future of humanity, the future of civilization.

We can't fathom the day when we no longer feel the cold and hear the sounds of the river spirits. It is to be hoped that we won't ever have to.

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Environmentalists from throughout the Southwest challenge electronic corporations to maintain a clean environment.

photo by Akwaid Evans

## Sacred Waters of Mother Earth

by Morgan Garrett

In mid-May a press conference was held in City Council chamber to discuss the environment and pollution of our waters. A new book entitled Sacred Waters: The Life-Blood of Mother Earth was presented along with testimony about water pollution throughout the Southwest. The book contains four case studies of high-tech water resource exploitation and corporate welfare in the Southwest. Participating groups were People Organized in Defense of Earth and her Resources (PODER), Silicon Valley Toxics Coalition, Southwest Organizing Project and Tonatierra Community Development Institute. Conspicuously absent were Austin environmental stalwarts like Save Our Springs (SOS), the Sierra Club and the Green's.

The coalition commandeered City Council chambers to issue their report which they say is "meant to sound the alarm for communities courting the computer industry as the key to economic security." The focus of the report was upon the impacts of high tech electronic manufacturing on the water resources and infrastructure of four key high tech communities — Albuquerque, New Mexico; Austin, Texas; Phoenix, Ari-

zona; and Santa Clara County, California. The study documents massive water pollution and water resources depletion by a who's who high-tech giants, including Intel, IBM, Hewlett-Packard, Fairchild Semiconductor, Advanced Micro Devices, Raytheon, Teledyne, TRW, National Semiconductor, Motorola and others. It also documents and challenges the billions of dollars of "corporate welfare" subsidies given away to some of the wealthiest corporations in the world.

To lure high-tech companies to their jurisdictions, officials in Austin, Phoenix, Albuquerque and Santa Clara County have provided an array of incentives to corporations, including property tax relief, infrastructure improvements, off site sewer and water systems, and direct water subsidies.

In many jurisdictions, individual residents now pay higher rates than corporate users, providing an enormous indirect subsidy to high tech companies. In addition, the costs of cleaning up contaminated sites and water supplies often fall on local and state governments. These costs are again borne by average citizens and which make corporate claims of overall economic benefits to the re-

gion questionable, the coalition claims.

The report also describes what the coalition calls "the high tech Pandora's Box being opened in communities across the arid West." They say these industries are "extremely resource hungry and create toxic by-products which will become the burden of communities long after the silicon boom ends."

There are currently 17 major high tech electronic companies in the Austin area, including IBM, Samson, Texas Instruments, Applied Materials, Motorola, Sematech, Apple, Advanced Micro Devices and 3M. Most of these companies have only started operating in Austin over the last 15 years, after extensive contamination was discovered in Santa Clara County and Phoenix, according to coalition spokesperson.

As high tech companies continue to relocate to Austin, the consumption of water by high tech electronic firms will continue to increase. According to a report in the *Austin American Statesman* "Austin could exhaust its current water allocation by 2030." The cost of water scarcity will subsequently be transferred, as is currently occurring, to residential users, impacting most significantly the low-

income populations around Austin (the majority of whom are people of color) who can least afford it. According to EPA's Toxic Release Inventory from 1989, Austin's high tech industry legally emitted over 720,000 pounds of toxins into the environment — about a ton of toxins per day. Most of the impact poorer communities of color. Also, the four ma-

ajor wastewater facilities for the City of Austin are located in communities of predominantly lower-income people-of-color. More and more, we have seen that the many costs associated with high tech development in Austin are borne by low-income, people-of-color, whether it is in the form of additional wastewater treatment plants, higher water prices, or access only to the lowest paying, most dangerous jobs in the computer industry.

"Communities of color especially, who have taken the brunt of the toxic waste and resource mining of the computer industry, must be heard," coalition members say. They add their contention that "a sustainable electronics industry must benefit communities as well as corporations for the long-term."

June 5, 1997

Albuquerque Tribune, June 6, 1997

# High-tech centers tough on water, report charges

By Sue Major Holmes

THE ASSOCIATED PRESS

An environmental coalition sounded a warning about water use and pollution by high-tech companies, saying people don't realize how thirsty and how toxic manufacturing plants are.

The Southwest Network for Environmental and Economic Justice and the Campaign for Responsible Technology on Friday released a report, "Sacred Waters: Life Blood of Mother Earth," which looks at high-technology computer chip and electronic firms in New Mexico, Arizona, California and Texas.

"Water means much more to us than just a commodity that can be bought and sold," said Sylvia Ledesma of Southwest Network in Albuquerque. "It's an environmental as well as an economic-justice issue. We need water to survive, and industry needs water to make money."

Ted Smith, executive director of the Silicon Valley Toxics Coalition in San Jose, Calif.,

said community groups must work to make high-tech industry pay its share of taxes and to develop better manufacturing techniques.

"We (Silicon Valley) got snuck up on," Smith said. "Too many of us bought the rhetoric that it was a clean industry."

The New Mexico portion of the study focuses largely on water use by Intel Corp.'s huge plant in Rio Rancho, the state's biggest high-tech manufacturer.

Michael Guerrero of the Albuquerque-based SouthWest Organizing Project said his group worries about the amount of water used by high-tech firms and the pressure on agricultural users to sell their water rights.

"You're seeing a shift of people, a shift off the land," he said. "A way of life is being affected."

Richard Draper, a spokesman for Intel's Rio Rancho plant, said the company has begun aggressive water-conservation efforts.

When Intel first looked at a major expansion project in 1992, the conventional wisdom

was that Albuquerque had plenty of water, he said. By the time the project began, a study had discovered water was not flowing into the aquifer as fast as it was being used.

Draper said Intel began immediate conservation methods.

Intel expected to use 10 million gallons of water a day by the time the expanded plant was in full operation in 1998, Draper said. Now, he said, officials estimate it will use 4.5 million to 5 million gallons a day.

Intel has spent millions of dollars to reuse and recycle water, he said. The plant is putting in a better water-purification system to save 500,000 gallons a day by next year and is tearing out bluegrass lawns in favor of low-water landscaping, he said.

He said production went up 20 percent between 1995-96, but actual water use dropped 15 percent.

The Southwest Network wants Intel and other high-tech firms to use a closed-loop water system in which a plant would continu-

ously clean and reuse its water.

Draper said Intel was looking at redesigning manufacturing processes to lower water needs but said such changes take a few years "to see how it works in a real-life factory situation."

Intel is also studying whether "gray water" — water after it's used in the manufacturing process — could be reused for public purposes, he said.

About 70 percent of Intel's water comes from its own wells, and about 30 percent comes from water from the city of Rio Rancho, Draper said.

Draper said the state permit that allowed Intel to drill three wells required monitoring their effect on the aquifer. Draper said the first two years have shown no significant impact at levels where homeowners in nearby Corrales drill their wells.

The state engineer has authority to step in any time he sees data that worry him, Draper said.

# Business

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SECURITY INFORMATION

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## Report: Intel Uses Too Much Water

### Groups Targeting High-Tech Industry

BY TANIA SOUSSAN  
Journal Staff Writer

Intel Corp. and other high-technology companies in the Albuquerque area's "Silicon Mesa" are using so much water they are threatening the supply available for residents and traditional farmers, according to a report released Friday.

"The costs go beyond just the impacts to the environment. What we're seeing is a shift in the lifestyle of the Southwest from traditional agriculture to high-tech manufacturing," said Michael Leon Guerrero of the Albuquerque-based SouthWest Organizing Project, one of the report's sponsors.

He criticized the computer industry for using millions of gallons of water a day and not doing enough to protect the water supply.

But Richard Draper, manager of media relations for Intel, said conservation has allowed the company to decrease water use 15 percent even while production grew by 20 percent. Intel uses 3.6 million gallons of water a day.

"Water is a precious resource to Intel," he said. "We want to be water smart and we've done a few things to aggressively reduce our use of water."

Guerrero and other authors of "Sacred Waters: Life Blood of Mother Earth" said Intel and other firms aren't doing enough.

"We expect a lot more of an industry that has become this dominant industry and has the resources to do a lot better," said Ted Smith, coordinator of the California-based Campaign for Responsible Technology.

He said the most important recommendation that came out of the report was the proposal that manufacturers use a closed-loop system in which water used to clean computer chips is recycled.

Draper said that would be great, but isn't economically feasible.

He said the plant is installing a new filtering system that will cut water use dramatically. Currently, 65 percent of the water Intel puts through a reverse osmosis system is clean enough to use in the manufacturing of chips. The new technology will increase that to 85 percent by next year, he said.

Water that isn't clean enough is used for irrigation or sent to the city's sewage treatment plant. Some other water is recycled and used in the building's cooling towers and air pollution scrubbers, he added.

The report, researched and written by grass-roots organizations, includes case

studies of Albuquerque, Phoenix, Austin, Texas, and Northern California's Silicon Valley. In California and Arizona, computer firms have been the cause of groundwater contamination, the report states.

In many cities, including Rio Rancho, where Intel is located, residents pay more for their water than industrial users, Guerrero said.

Rio Rancho homeowners pay \$1.75 for 1,000 gallons of water while Intel pays 87 cents for the same amount of water bought from the utility. Intel also pumps water from its own wells at a cost of about 25 cents for 1,000 gallons, according to the report.

Draper said the industrial rate reflects the lower cost of delivering a large quantity of water to one user.

Jack Jekowski, president of the Technology Industries Association of New Mexico, said the report has good recommendations but doesn't present all the facts.

# Environmentalists want better water use by Intel

## Associated Press

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JENNIFER SCOTT

*Michael Leon-Guerrero of SWOP (2nd from left) and other activists discuss a report on high-tech industry*

## Hi-Tech Industry Probed by SWOP

The SouthWest Organizing Project (SWOP), an Albuquerque-based environmental justice advocacy group, released a report last week examining the consequences of high-tech industry throughout the Southwest. *Sacred Waters: Life-Blood of Mother Earth* documents the water-use and pollution histories of companies in Albuquerque; Austin, Texas; Phoenix, Ariz.; and Santa Clara County in California. SWOP worked with environmental groups in each city and the Electronics Industry Good Neighbor Campaign to compile the report.

At a press conference in Albuquerque last week, representatives from the different cities and the Good Neighbor campaign spoke about their experience with so-called "clean" industry, from parts of California that have become so polluted that they have been designated Superfund sites by the federal government to the relatively new Silicon Hills of Austin. The report advocates that the extremely profitable high-tech companies, including Intel,

dedicate some of their resources to developing closed-loop water recycling, a process by which water could be cleaned up enough after its industrial use to be reused again.

*For more information on Sacred Waters, call SWOP at 247-8832.*