

CONTRIBUTIONS OF WOMEN IN THE UNITED STATES IN THE FIELD OF WATER RESOURCES

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Summary

This paper focuses on the role of women in water management positions, public interest groups, and environmental groups in California and the western United States. The levels of women involved in the decision-making process involving water issues are analyzed. The role of women as consumers of water and guardians of their families is also discussed. A plan to interest young American women in careers in water is also explored.

It is concluded that the absence of women in official roles has delayed progress in improving water quality in the United States. The author believes that women in their unofficial capacities as mothers, consumers, leaders, and members of non-governmental organizations will contribute the most to immediate improvement of the nation's water supplies.

1. Introduction

Research in the water resources field by the Water Education Foundation has led to the conclusion that, while American women are moving into water management and political positions, perhaps their greatest influence will come from their unofficial positions as family caregivers and managers. In their daily lives they must make decisions and choices for their families involving natural resources such as water. In certain instances, these decisions have led to specific policy changes.

2. Mothers Against Toxics

As water quality has become a bigger issue in the United States, women, in their capacities as mothers, have drawn attention to groundwater and surface water pollution and suggested the link between childhood diseases and water quality. A best selling book and film, “A Civil Action”, is based on such a story set in Woburn, Massachusetts in the 1970s and 1980s. The book and film are based on the true courtroom drama in which two of the largest US corporations were accused of causing the deaths of children from leukemia. The link between polluted well-water and lymphocytic leukemia was questioned by an observant mother, Ann Anderson, in Woburn, Massachusetts. Her three-and-a-half year old son was diagnosed, and later died, from the disease. She began meeting with several other neighborhood mothers whose children were also being treated for the same type of leukemia. At first, doctors and water professionals dismissed the idea that several cases of leukemia in the same neighborhood were related to anything, certainly not the water, which was tested to and met the standards of 1972. Ann Anderson argued that the water had never tasted right, it never looked right, and it never smelled right. These events occurred at a time when people, especially women, trusted officials—male engineers—to keep the water clean. The women homemakers did notice the water corroded their dishwashers, sinks, and faucets. The wells supplying the water from the Aberjona aquifer, which later proved to be contaminated due to illegal dumping of toxic chemicals, were dug in the early 1960s. Chlorination was added in 1968. Through the early 1970s the wells were closed several times because of citizen complaints about taste, color, and odor but they were always reopened due to persistent drought conditions.

As more cases of leukemia appeared—12 total in the neighborhood, eight within a half-mile radius, six almost next door to each other—Ann Anderson continued to speculate about the link between the drinking water and these cases of childhood leukemia. However, she was pitting herself and a few mothers against the local public health department, city council, and the mayor. She was accused of being an emotional, hysterical mother.

However, by 1979, Woburn police were investigating the appearance of 184 barrels of industrial waste on land near the pumps. The chemicals TCE and perc, trichloroethylene and tetrachloroethylene, had heavily contaminated the wells and they were finally shut down. Who was responsible for the contamination of the wells? How long had it been going on? Eventually the mothers involved an attorney, Jan Schlichtmann, who took on the case against the W.R. Grace food-packaging factory and Beatrice’s J. J. Riley tannery. Mr. Schlichtmann tried to prove that land near the wells was used for years as a dumpsite by the corporations and that dumping was done with the knowledge of the corporations. He did not win in court and later appeals were denied. However, a former employee of the tannery subsequently admitted he had secretly removed hazardous materials in the fall of 1983, before the US Environmental Protection Agency (EPA) came on to the property to perform tests.

2.1 Love Canal

Eventually, the mothers and Mr. Schlichtmann were vindicated when the EPA stated

that the Beatrice land was the most grossly contaminated area in the aquifer and by far the largest contributor to the pollution of the wells. Years later, the EPA unveiled a reclamation plan that would take 50 years to complete and cost about US\$ 70 million, the largest and most costly environmental cleanup in New England. W. R. Grace pleaded guilty to two felony counts for lying to the EPA and was fined the maximum fine, only US\$ 10 000. By 1997, 74 million gallons of contaminated water were pumped out of the Aberjona aquifer. It will take nature thousands of years to clean up the entire river.

During this time, there were other cases of observant mothers going up against the water utility establishment. The case of the Love Canal crisis in the United States is another example of mothers, led by Lois Gibbs who later founded the Center for Health, Environment and Justice, bringing a toxic water problem to public notice. Twenty years ago, in the spring of 1978, Mrs. Gibbs was a homemaker who discovered that her child was attending an elementary school built on top of a 20 000 ton, toxic-chemical dump in Niagara Falls, New York. She organized her neighbors into the Love Canal Homeowners Association and struggled for more than two years for relocation. Opposing the group's efforts were the major chemical manufacturer, Occidental Petroleum, and local, state, and federal government officials who claimed that the leaking toxic chemicals, including dioxin, were not the cause of high rates of birth defects, miscarriages, cancers, or other health problems. In 1980, US President Jimmy Carter delivered an Emergency Declaration that moved 900 families from the hazardous area—a victory for this mothers movement. Since that time, Lois Gibbs and her organization have reached out to people across the US who are experiencing similar problems.

Mothers & Others is another group born out of mothers concerned about effects of pollution on their children. Their motto, “environmental change begins at home,” guides their efforts as consumers involved in the promotion of safe food and healthy homes.

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Biographical Sketch

Rita Schmidt Sudman is Executive Director of the Water Education Foundation. For the past twenty years, the Foundation has developed and implemented education programs leading to broader understanding of water issues and to resolution of water problems in the western United States. Ms. Sudman has a Master's degree in Communications and oversees the Foundation's information programs including public television shows and school programs.