

Monitoring of Discharges and Baseline Water Quality at the New World Project, Montana, USA.

The New World Mining Project area is located three miles from the northeastern boundary of Yellowstone National Park in Montana, USA. Dr. Ann Maest was contacted by the Greater Yellowstone Coalition (GYC), an environmental group concerned with the health of the Yellowstone ecosystem, to be an expert witness in a Clean Water Act suit brought by GYC and other small community groups against Crown Butte/Noranda. Earth Justice Legal Defense Fund provided the attorneys for the case, and Ann served as the water quality expert. The lawsuit addressed potential illegal discharges of acid mine drainage from the site and also included natural acid drainage, water quality, and site remediation issues. Ann conducted water quality sampling of the discharge and of streams in the area between the mine site and Yellowstone National Park to determine whether pollutants were being released and if natural conditions could be responsible for the measured concentrations. Macroinvertebrates and stream sediment were also sampled as part of the investigation. The monitoring results showed that pollutants were being released, and that the concentrations observed could not be attributed to natural conditions. The lawsuit was successful, and Crown Butte was required to obtain a permit for the acid drainage discharge and to remediate the site. After the lawsuit was won, President Clinton became interested in the ramifications of development of a large gold mine so close to the border of Yellowstone National Park. Ann was involved in the technical aspects of negotiations between federal government, mining company and environmentalists on land exchange, and also evaluated remediation and treatment alternatives for the historical mined area. The mining property was successfully bought out by the federal government and remains protected to this day.