

# Sun River Conservation

Reiche, Sabia (School: Keyser High School)

Wolfe, Serenity (School: Keyser High School)

In 2004, the State of Montana deemed the lower Sun River between the town of Sun River and the city of Great Falls impaired for conductivity, sedimentation, nitrogen, and phosphorous. The purpose of this research was to determine the source of contamination in the lower Sun River. Three potential sources of contamination were hypothesized. These included the town of Sun River, Muddy Creek, and the village of Sun Prairie. Physical and chemical data was collected from multiple sample locations along the lower Sun River. The standard error was calculated for pH, conductivity, and temperature. All pH values fell outside the estimate of error. All samples except SRP-4 and SRP-5 fell outside the estimate of error for conductivity. Nitrite and sulfate exceeded maximum acceptable values. The data supports the hypothesis that the town of Sun River and Muddy Creek were sources of contamination.