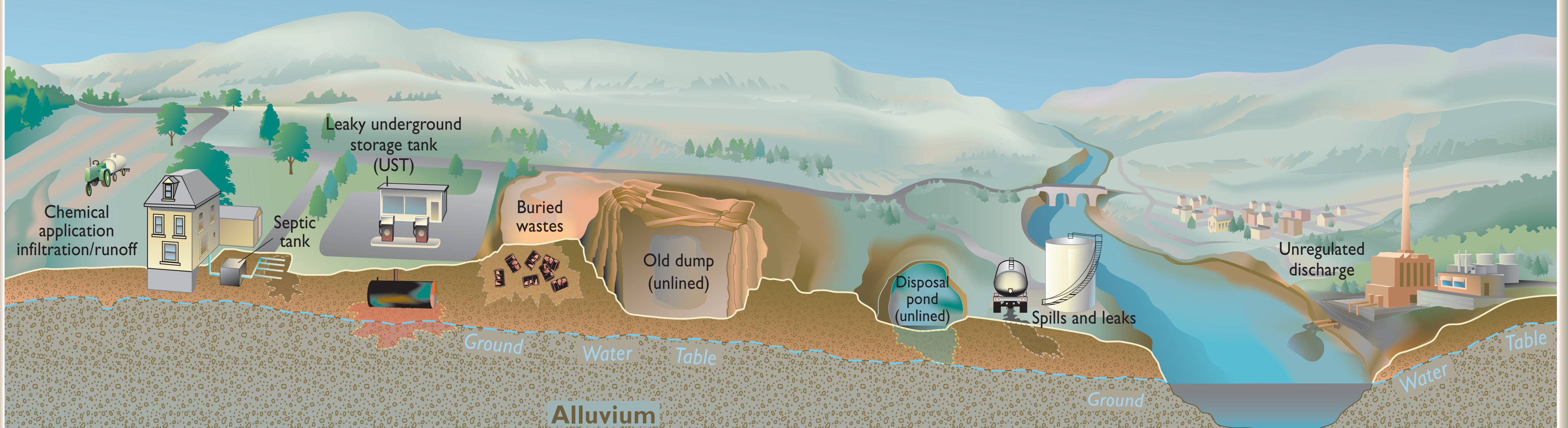


WATER & CONTAMINATION

Environmental Geology

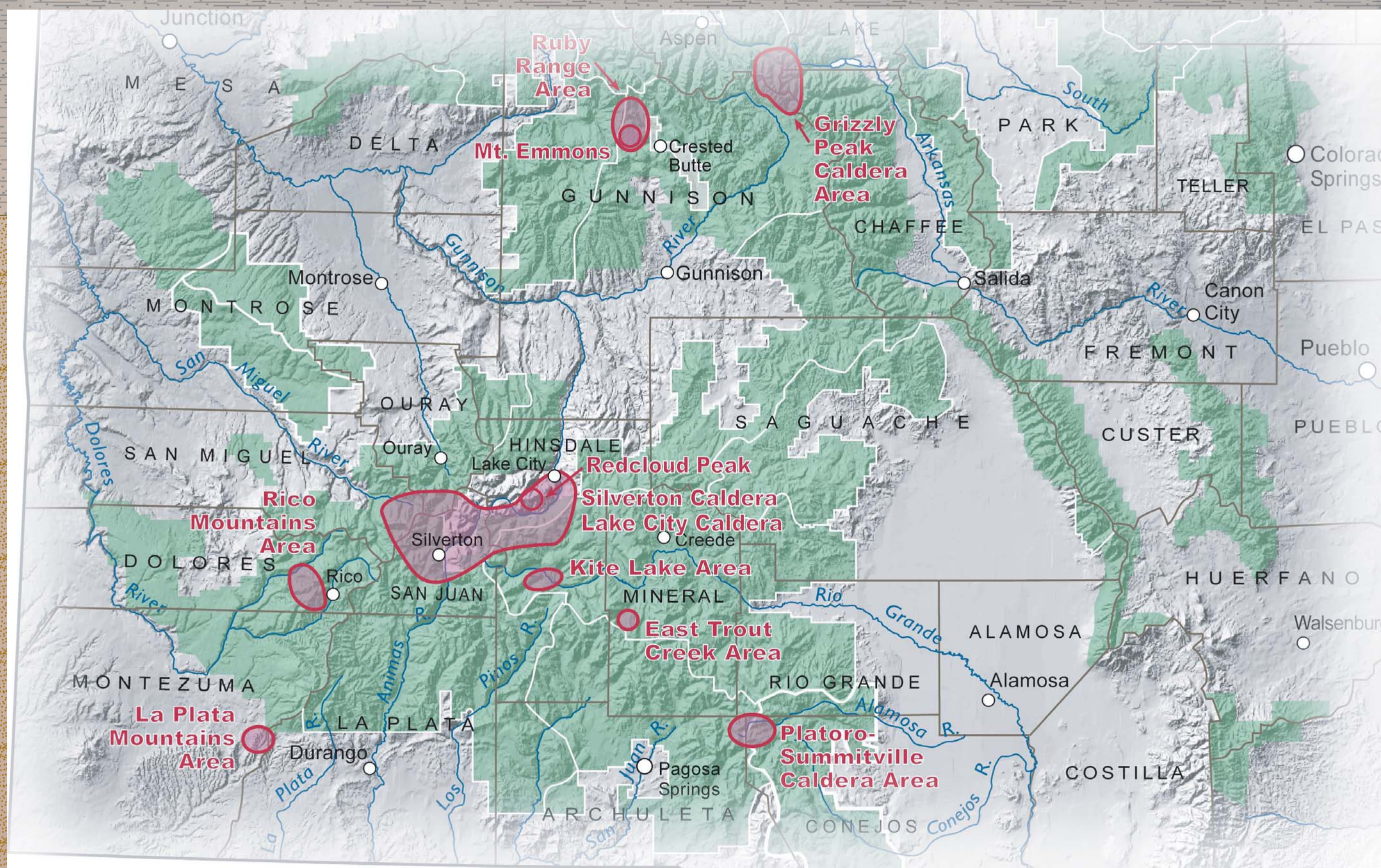
POTENTIAL SOURCES OF HUMAN-MADE CONTAMINATION



Examples of various potential contamination sources that can affect surface and ground water

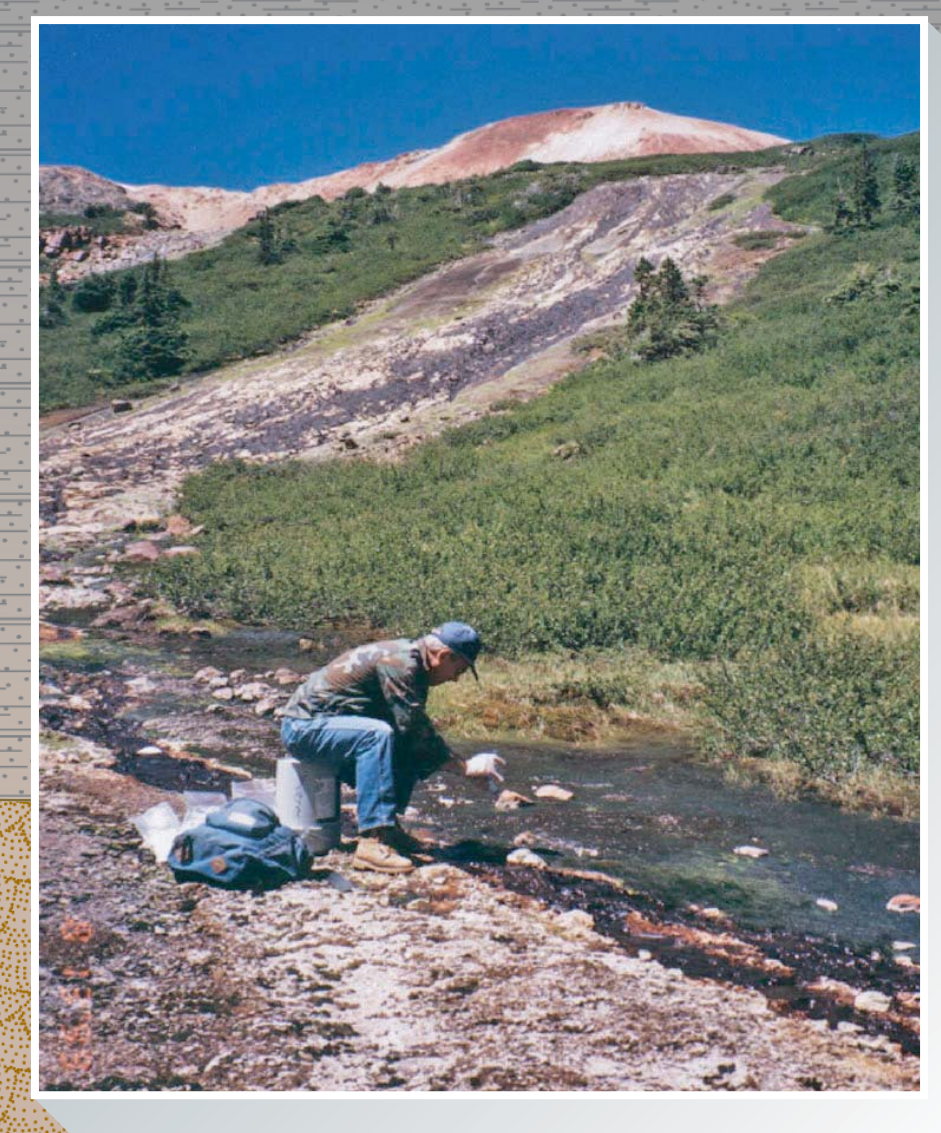
ACID WATER CONTAMINATION

NATURALLY DEGRADED WATER IN COLORADO



Areas of naturally degraded water in headwater areas of southwest Colorado

The Colorado Geological Survey (CGS) is conducting investigations in areas of Colorado where natural geologic processes produce metal-rich, acidic water (often called Acid Rock Drainage, or ARD). Many of these areas are associated with past volcanic activity. At that time, hot sulfur-rich fluids derived from magma deposited sulfide minerals such as pyrite in the surrounding rocks. As these rocks are eroded and exposed to water and oxygen they produce ARD which enters streams.



Sampling natural Acid Rock Drainage water



Historic mining in sulfide mineral deposits can also induce acid-rock drainage (often called acid mine drainage) into watersheds. In these situations human activity has caused a similar ARD process.