

# 2023 Seasonal contamination found in Upper Pecos River



Sampling at Dalton Camp 2023

(Photo: Teresa Seamster)

The upper Pecos River above the town of Pecos, N.M., is still showing signs of acid mine drainage from the massive mine contamination left over from the Tererro Mine of the 1930s.

Water testing conducted in 2023 showed that some metals and minerals - Aluminum, Lead, Calcium and Iron - were all present at levels that impact use as drinking water or that affect human health.

The water is also showing significant impacts from unregulated sources of E. coli along the tributaries. However, the main river E. coli samples from Dalton Camp and Pecos bridge average in the low-medium risk category.

## Total Metals /Minerals

### Elevated levels from July-August-September

**Calcium - US average in drinking water is 10-20 mg/L**

Tererro-59 mg/L, Indian Creek -55 mg/L, Dalton Camp-37 mg/L, Pecos Bridge-40 mg/L

**Aluminum - Health Effects can occur at >0.05 mg/L**

Tererro-0.33 mg/L, Indian Creek-2.5 mg/L\*, Dalton Camp-0.16 mg/L, Pecos Bridge-0.25 mg/L

(\* high spike, Indian Creek averages 0.15 mg/L)

**Iron - Objectionable >0.3 mg/L, Health Effects 10 mg/L**

Tererro-0.4 mg/L, Indian Creek-3.1 mg/L

**Lead - Minimum Reporting Level 0.001**

Tererro-0.002 mg/L, Indian Creek-0.003 mg/L

**Other Metals analyzed:** Boron, Magnesium, Manganese, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Molybdenum, Nickel, Selenium, Silver, Thallium, Uranium, Vanadium & Zinc (all below Minimum Reporting Level)

**Gross Alpha/Beta (radioactive elements)** – All samples were below National Drinking water standards - Gross Alpha 15 pCi/L - but detectable at all sites ranging from 0.9pCi/L to 4.9 pCi/L.

**Nutrient Levels**, often found in run-off from agricultural fields and livestock and that cause algae bloom, showed slight elevations of nitrogen and phosphate at all sites, but all ammonia levels were acceptable.

**E. coli levels were elevated at all sites**, ranging from **low to extremely high** during the summer months.

**World Health Organization –safe drinking water should have NO E. coli present**

1-10 MPN/100ml = low risk/ 11-100 = medium risk/ > 100 = high risk

**Highest E. coli site – Tererro 209.8 MPN/100ml \*extremely high level**

**Lowest E coli site – Dalton Camp 9.7 MPN/ml**

**Water Sentinels: Teresa Seamster, Ginny Seamster, Tannis Fox & Trout Unlimited: John Lopez**