Animas and San Juan Rivers
Exposure and Risk Dashboard
May 19, 2017

Risk Levels – This dashboard addresses potential contaminant exposure pathways and risks for the Animas and San Juan River corridors in New Mexico, with emphasis on issues related to the August 5, 2015 Gold King Mine (GKM) spill. This evaluation will be updated in the future, as necessary, if new data becomes available. For more information, including handouts on topics noted below, please visit www.NMEDRiverWaterSafety.org.

Safe	Use Caution	Unsafe

Potential Exposure Pathway	Risk Level	Explanation
Public Drinking Water Supplies		Public drinking water supplies are subject to multiple protective requirements of the federal Safe Drinking Water Act (SDWA) and, with one exception, are presently safe for all uses. These requirements include: infrastructure construction standards; solids settling and treatment; disinfection; treated water testing; and New Mexico Environment Department (NMED) inspections. The Harvest Gold water system remains on a boil water advisory for reasons unrelated to the GKM spill. For more information on public drinking water systems, please visit the Drinking Water Watch website.
Private Domestic Wells		Private domestic wells are not subject to the protective requirements of the federal SDWA. Many private wells were not constructed in a sanitary manner or have deteriorated as the well has aged. These wells are at risk of contamination by bacteria, parasites, or viruses. See Fact Sheet on disinfecting a domestic well with shock chlorination. High levels of manganese, iron, sulfate, and total dissolved solids existed in some wells prior to the Gold King Mine (GKM) spill. Elevated lead has been detected in private water systems that have galvanized steel plumbing components or lead solder. Following the GKM spill NMED tested more than 600 private domestic water wells in San Juan County, NM. There is no evidence that the GKM spill contaminated any water wells in New Mexico. NMED and the N.M. Bureau of Geology continue to monitor private domestic wells for evidence of mining and milling contamination.
River Water for Domestic Supply		Untreated river water should never be used for domestic supply, even if there are not visible signs of contamination. When untreated water is consumed from surface sources there is a risk of ingesting harmful bacteria, parasites, or viruses. Untreated river water also may contain high levels of lead and arsenic when spring runoff or storm events stir up contaminated river sediments.
Water Hauling		If you haul water for drinking and cooking, it is recommended that you use commercial bottled water, or obtain water from a public water supply system. Hauling untreated water from a ditch, river, lake, spring or private well is not recommended. See Fact Sheet on safe water hauling practices.

River Water for Irrigation		River water presently complies with all standards for irrigated agriculture, and should be safe for irrigation of all crops. See the Fact Sheet on agricultural uses of water.
Crops		Preliminary testing of crops by New Mexico State University shows safe levels of heavy metals. Crops will continue be tested during the 2017 growing season to monitor safety for consumption by humans and livestock.
River Water for Livestock		River water presently complies with all standards for livestock watering. See the Fact Sheet on agricultural uses of water.
Livestock		The New Mexico State Veterinarian, New Mexico Department of Agriculture Veterinary Diagnostic Laboratory, and local veterinarians are on the alert for any signs of unusual animal distress or illness that could result from the GKM spill or other mining and milling contamination.
River and Ditch Sediment		NMED is monitoring sediment contamination in New Mexico to identify any hot spots that exceed residential risk screening levels for lead and other metals. The residents of San Juan County can be the eyes and ears for NMED in the field. Anyone who sees discolored or contaminated soil should notify NMED immediately by calling 1-800-219-6157. If you are comfortable doing so, you may pick up a sampling kit from the NMED Farmington Office located at 3400 Messina Dr. (505) 566-9741 to safely collect a sediment sample that will be tested by NMED.
Fish		Fish tissue testing by the New Mexico Department of Game and Fish has not identified any heavy metal contamination attributable to the GKM spill. Elevated mercury and DDT were known to exist in fish tissue from some water bodies in San Juan County long before the GKM spill. Mercury is believed to originate largely from the burning of coal. DDT was banned as an insecticide in the United States in 1972, but is persistent in the environment. The "Quality Waters" of the San Juan River below Navajo Lake are located upstream from the confluence with the Animas River and were not affected by the GKM spill or by other mining and milling waste discharges into the Animas River. NMED has issued Fish Consumption Advisories for mercury and PCBs in Lake Farmington, and for mercury in Navajo Reservoir.
Recreational Activities		Mining and milling contaminants do not presently pose hazards to people enjoying water sports, fishing and other recreational activities in and near the Animas and San Juan Rivers in New Mexico. However, both rivers may contain bacteria, parasites, or viruses which could pose a health hazard to people who come into contact with river water. It is recommended that people wash thoroughly after going in the river and avoid swallowing river water when swimming or doing water sports.