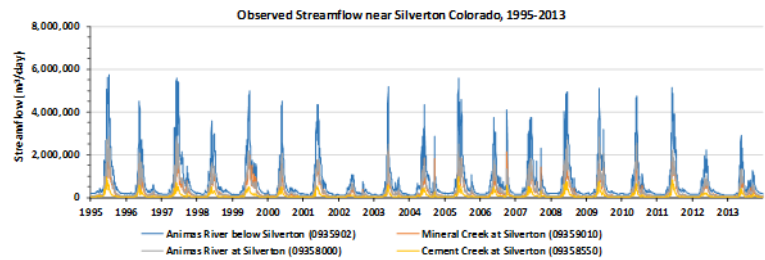


Silverton Colorado streamflow analysis

Thursday, December 29, 2016 11:13 AM

A)

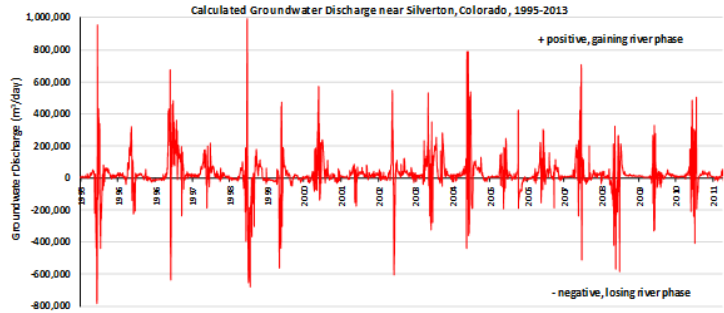


Streamflow analysis of the upper Animas River near Silverton, Colorado. A) Streamflow hydrographs of measured discharge (Q) in cubic meter per day of the Animas River and tributaries near Silverton, Colorado. B) Inferred groundwater inflows along the section of the Animas River around Silverton, CO, 1995-2013, where the water balance is

$$Q_{GW} = Q_{Abs} - Q_{A@S} - Q_{C@S} - Q_{M@S}$$

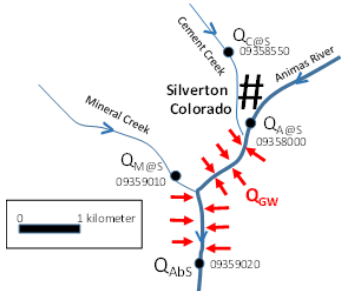
where USGS gages include the Animas River below Silverton (Q_{Abs}), Animas River at Silverton ($Q_{A@S}$), Cement Creek at Silverton ($Q_{C@S}$), Mineral Creek at Silverton ($Q_{M@S}$).

B)

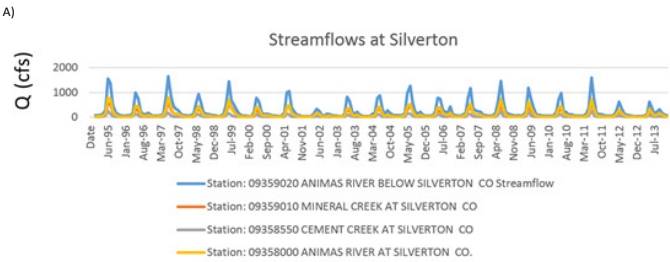


Analysis of discharges in m³/d using MS Excel

L:\priv\AnimasRiver\ARP_River_Modeling
\ARP_GW_MODELING\Processed\Excel
\River_Water_Balance_SilvertonCO_1995-2013.xlsx

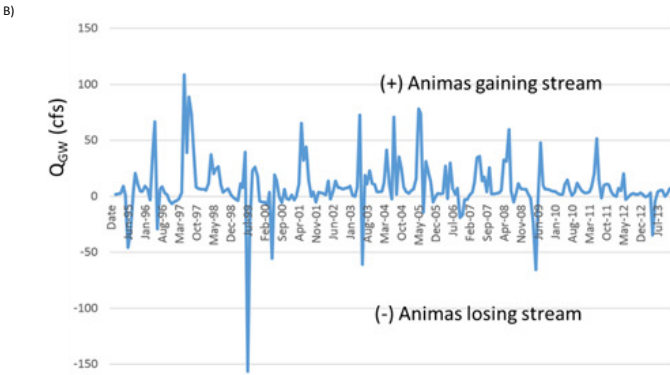


BELOW - OLD LEGACY ANALYSIS - REPLACED -----x



Original analysis USGS GW Toolbox 1.1.1 (10/20/2015)
Project File: 14080104.mwpj
Discharges in cfs (cubic feet per second)

$$Q_{GW} = Q_{Abs} - Q_{A@S} - Q_{C@S} - Q_{M@S}$$



Streamflow analysis of the upper Animas River near Silverton, Colorado. A) Streamflow hydrograph of measured discharge in cubic feet per second (cfs) of the Animas River at Silverton, Colorado. B) Inferred groundwater inflows along the section of the Animas River around Silverton, CO, 1995-2013. The positive inflow implies that the Animas River is gaining groundwater most of the time. The negative exceptions suggest the river losing flow to the alluvial groundwater system. Graphics from the USGS Groundwater Toolbox.