



Please review all water documents. When submitting please be sure they are legible for review.

To: Shawn Shaffer/Home Run Restorations Inc.

CC: Joseph Alessi, PLS, CRA, GRI, BSME
Alessi and Associates, Inc.

Date: May 23, 2019

RE: Wyoming Estates Water Supply per state engineer, no replacement plan application has been received.

Number appears wrong, and the Laramie-Foxx Hill report was the only one included

Dear Shawn,

Wyoming Estates minor subdivision is comprised of four lots. Lot 1 is 5.05 Acres, Lots 2 and 3 are 5.10 Acres and Lot 4 is 20.78 acres. The proposed water supply for the subdivision is the underlying groundwater aquifer(s). Determinations of Water Rights for the subdivisions water supply were obtained for the not nontributary Denver (3541-BD) and Arapahoe (35421-BD) aquifers. Based on the Determinations and the required El Paso County 300 year required water supply, the Denver aquifer can supply a total of 2.72 AF/Yr and the Arapahoe aquifer, a total of 4.30 AF/yr.

Either the Denver or Arapahoe aquifers present a viable option for residential water supply. Use of the Denver aquifer groundwater will require a Replacement Plan. Based on groundwater modeling of 300 years of pumping, pumping of 0.48 AF/Yr (per well) will result in a total maximum depletion of 0.229 AF to Designated Basins. Based on an in-home use of 0.25 AF/Yr, 90% can be claimed as return flow/replacement or 0.23 AF/Yr provided wastewater is treated using individual non-evaporative septic systems. Therefore, it is feasible for all four lots to have one well in the Denver aquifer with pumping a total of 0.48 AF/yr.

If the Arapahoe aquifer is used, replacement of depletions from pumping is 4% of the amount pumped. Each well could be allocated up to 1.08 AF/Yr based on a 300 years of pumping.

For either case, there is a sufficiency of water supply however, the Replacement Plan will need to be finalized for the Denver Aquifer prior to state approval.

Sincerely,

Julia M. Murphy MS PG
Hydrogeologist/Professional Geologist