Supplemental Materials

The Kolmogorov-Smirnov (K-S) test was used to determine the goodness of fit at 0.05 significance level and the sum squared error between each observation group ranked the best distribution function. The log-normal distribution was selected to decrease the skewness of the time series. **Table S1** includes the KS p-values and the sum of squared error for all control points and **Figure S1** shows the fitted probability distribution functions of some control points including Pecos River, El Paso, and Rio Conchos. The software used to select the best pdf fit was the Python package: fitter. We have incorporated the suggestions in this section of the manuscript and included the below table and figures in supplemental materials.

Table S1. Kolmogorov-Smirnov test p-values and the sum of squared error for the lognormal probability distribution.

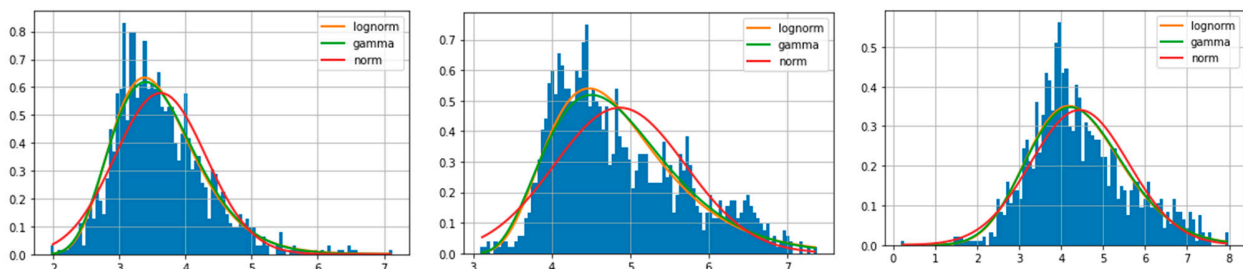| Control Point	Lognormal K-S p-value	SSE
San Marcial	0.01	0.68
El Paso	0.01	0.81
Above Amistad	0.03	0.79
Anzalduas	0.02	0.38
Rio Conchos	0.01	0.25
Pecos River	0.02	0.38
Rio Salado	0.04	0.21
Rio San Juan	0.03	0.17

Figure S1. Fitted probability distribution functions including lognormal, gamma, and normal distributions for the control points: Pecos river (right), El Paso (center), and Rio Conchos (left)