6.11   Transferring Gaged Data

6.11.1 Procedure

   Gaged data can be transferred up or downstream on the gaged stream <u>only</u>. If the drainage area for the location of concern is $\geq$ 75% and $\leq$ 125% of the drainage area at the gage, then the gaged data can be transferred with equation 6.12.

6.11.2 Transfer Equation

   The following equation shall be used to transfer gage data:

$$\frac{Q_1 / A_1}{Q_2 / A_2} = \frac{A_1^{[(0.894 / A_1^{0.048})-1]}}{A_2^{[(0.894 / A_2^{0.048})-1]}} \qquad \textbf{(English only)}$$

$$\textbf{(6.12)}$$

   Q_1 and A_1 represent the discharge rate and watershed area at one point in the watershed and Q_2 and A_2 represent the rate and area at the gage or known outlet which remain constant while Q_1 and A_1 are varied.

   Q = discharge in cubic feet per second
   A = drainage area in square miles

Source: Adopted from Mockus, V., SCS National Engineering Handbook, Section 4, Hydrology, 1972