

Revision History

Publication Series and Series Number: Scientific Investigations Report 2007-5158
Publication Title: Methods for Estimating Magnitude and Frequency of Peak Flows for Natural Streams in Utah
Publication Authorship: T.A. Kenney, C.D. Wilkowske, and S.J. Wright
First Version and Date of Release: 1.0 August 31, 2007
Current Version and Date of Current Release: 3.0 January 4, 2008

List of Changes for Revision 2.0

On Cover:

Addition of “Version 2.0, October 2007” under report series and number.

On Title page:

Addition of “Version 2.0, October 2007” under report series and number.

On page 13, Table 5, for Region 1 Equations:

Changed from:

$$\begin{aligned}PK2 &= 1.52 \text{ DRNAREA}^{0.677} (\text{ELEV}/1,000)^{0.144} \\PK5 &= 5.49 \text{ DRNAREA}^{0.614} (\text{ELEV}/1,000)^{0.113} \\PK10 &= 10.3 \text{ DRNAREA}^{0.581} (\text{ELEV}/1,000)^{0.098} \\PK25 &= 19.7 \text{ DRNAREA}^{0.547} (\text{ELEV}/1,000)^{0.084} \\PK50 &= 29.4 \text{ DRNAREA}^{0.524} (\text{ELEV}/1,000)^{0.075} \\PK100 &= 40.4 \text{ DRNAREA}^{0.512} (\text{ELEV}/1,000)^{0.068} \\PK200 &= 58.2 \text{ DRNAREA}^{0.483} (\text{ELEV}/1,000)^{0.061} \\PK500 &= 85.4 \text{ DRNAREA}^{0.457} (\text{ELEV}/1,000)^{0.053}\end{aligned}$$

Changed to:

$$\begin{aligned}PK2 &= 1.52 \text{ DRNAREA}^{0.677} 1.39^{(\text{ELEV}/1,000)} \\PK5 &= 5.49 \text{ DRNAREA}^{0.614} 1.30^{(\text{ELEV}/1,000)} \\PK10 &= 10.3 \text{ DRNAREA}^{0.581} 1.25^{(\text{ELEV}/1,000)} \\PK25 &= 19.7 \text{ DRNAREA}^{0.547} 1.21^{(\text{ELEV}/1,000)} \\PK50 &= 29.4 \text{ DRNAREA}^{0.524} 1.19^{(\text{ELEV}/1,000)} \\PK100 &= 40.4 \text{ DRNAREA}^{0.512} 1.17^{(\text{ELEV}/1,000)} \\PK200 &= 58.3 \text{ DRNAREA}^{0.483} 1.15^{(\text{ELEV}/1,000)} \\PK500 &= 85.4 \text{ DRNAREA}^{0.457} 1.13^{(\text{ELEV}/1,000)}\end{aligned}$$

List of Changes for Revision 3.0

On Cover:

Addition of “Version 3.0, January 4, 2008” under report series and number.

On Title page:

Addition of “Version 3.0, January 4, 2008” under report series and number.

On page 4:

Figure 2 has been revised.

On page 5:

Equation 3 changed from:

$$Q_{T(u)} = \left[\frac{(Q_{T(g1)}(DA_{g2} DA_u) + Q_{T(g2)}(DA_u DA_{g1}))}{(DA_{g2} DA_{g1})} \right]$$

Equation 3 changed to:

$$Q_{T(u)} = \left[\frac{(Q_{T(g1)}(DA_{g2} - DA_u) + Q_{T(g2)}(DA_u - DA_{g1}))}{(DA_{g2} - DA_{g1})} \right]$$

On page 5:

Text changed from:

Streams that drain small drainage basins (less than 20 mi²) in Utah appear to exceed the envelope curve for maximum rainfall-runoff floods in the United States (Costa, 1987), while streams that drain larger drainage basins (greater than 20 mi²) appear well below the limit. The reason for the differences for the smaller drainage areas is not known.

Text changed to:

Maximum natural peak flows for streams in Utah are well below the envelope curve of the United States (Costa, 1987).