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: 4.0 March 10, 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:

```
PK2 = 1.52 DRNAREA<sup>0.677</sup> (ELEV/1,000)<sup>0.144</sup>
PK5 = 5.49 DRNAREA<sup>0.614</sup> (ELEV/1,000)<sup>0.113</sup>
PK10 = 10.3 DRNAREA<sup>0.581</sup> (ELEV/1,000)<sup>0.098</sup>
PK25 = 19.7 DRNAREA<sup>0.547</sup> (ELEV/1,000)<sup>0.084</sup>
PK50 = 29.4 DRNAREA<sup>0.524</sup> (ELEV/1,000)<sup>0.075</sup>
PK100 = 40.4 DRNAREA<sup>0.512</sup> (ELEV/1,000)<sup>0.068</sup>
PK200 = 58.2 DRNAREA<sup>0.483</sup> (ELEV/1,000)<sup>0.061</sup>
PK500 = 85.4 DRNAREA<sup>0.457</sup> (ELEV/1,000)<sup>0.053</sup>
```

Changed to:

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

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:

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).

On page 8:

Equation 3 changed from:

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

Equation 3 changed to:

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

List of Changes for Revision 4.0

On Cover:

Addition of "Version 4.0, March 10, 2008" under report series and number.

On Title page:

Addition of "Version 4.0, March 10, 2008" under report series and number.

On page 13, Table 5, for Region 2 Equations:

Changed from:

$$PK200 = 8.79 DRNAREA^{0.592} 1.05^{PRECIP}$$

Changed to:

$$PK200 = 8.79 DRNAREA^{0.592}$$
 1 1.055 PRECIP

Footnote added:

¹ Value not rounded for accuracy purposes.