



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

May 15, 2008

CIRCULAR LETTER 2008-05

2004 REGRESSION EQUATIONS/STREAMSTATS

COUNTY ENGINEERS/SUPERINTENDENTS OF HIGHWAYS
MUNICIPAL ENGINEERS/DIRECTORS OF PUBLIC WORKS
CONSULTING ENGINEERS

With the issuance of this Circular Letter, hydraulics for all projects designed and submitted for review by the department should use discharges as computed in accordance with the 2004 Regression Equations, as provided in USGS Scientific Investigations Report 2004-5103, which may be found at <http://il.water.usgs.gov/pubs/sir2004-5103.pdf>. These equations supersede those previously provided by the USGS Rural Regression Equations 87-4207 (Curtis study).

In order to ensure more consistent and reliable discharges than may be determined with manual calculations, the U.S. Geological Survey, in collaboration with the Illinois Department of Transportation and the Illinois Department of Natural Resources' Office of Water Resources, developed a web-based solution called StreamStats. It is located at <http://streamstats.usgs.gov/ilstreamstats/>. Discharges at various design years may be determined directly using this program. Peak flow statistics for flood design years not shown should be extrapolated from the values provided.

If you have any questions regarding this Circular Letter, please contact Mr. Jim Klein at (217) 782-5928 or james.klein@illinois.gov.

Sincerely,

A handwritten signature in black ink that reads "Ralph E. Anderson".

Ralph E. Anderson, P.E., S.E.
Engineer of Bridges and Structures

cc: FHWA, Illinois Division, Attn: Dan Brydl