

**PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT'S  
TECHNICAL POLICY**

**POLICY NUMBER**

Technical Policy, TECH-010 EFFECTIVE DATE: May 15, 2007

**POLICY NAME**

Rainfall Input for Hydrologic Modeling

**PURPOSE**

To describe rainfall input requirements for use in 16.16 (FLOODPLAIN MAPS AND BOUNDARIES) and for any other determination of hydrologic discharge described in Title 16, Floodplain Erosion Hazard Management Ordinance No. 2005-FC 2.

**BACKGROUND**

To determine regulatory discharges, a hydrologic model is used. These models require the input of a given rainfall depth over a duration for a specified return-period. Historically in Pima County, the National Oceanic and Atmospheric Administration (NOAA) Atlas 2 was used as a basis for determining these rainfall depths. More recently, NOAA has prepared new rainfall estimates, published in the NOAA Atlas 14, which supersede NOAA Atlas 2.

Within NOAA Atlas 14, estimates are published for the mean and upper 90% confidence interval. An analysis by the Pima County Regional Flood Control District (District) staff and its consultants indicated that the upper 90% confidence interval values will result in little change in rainfall input from the NOAA 2 rainfall atlas and be more conservative than the NOAA 14 mean rainfall.

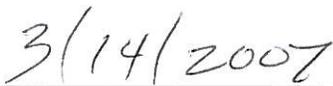
**POLICY**

All hydrologic models used for flood control purposes shall use the NOAA Atlas 14, upper 90% confidence interval rainfall (version 4.0 or greater), except as approved by the Director.

Submittals that have been reviewed by the District prior to the effective date may continue to use NOAA 2 rainfall until the submittal has been reviewed and approved by the District.

**APPROVED BY:**

  
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Suzanne Shields, Director and Chief Engineer  
Pima County Regional Flood Control District

  
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Date