FLOOD PREPARATION AND RESPONSE

Kevin Stewart’s responsibilities at the Urban Drainage and Flood Control District (UDFCD) in Denver, Colorado, include overseeing the operation and maintenance of an area-wide ALERT system consisting of approximately 170 real-time reporting stations. A registered professional engineer, he manages the district’s Information Services and Flood Warning Program and chairs the National Hydrologic Warning Council.

With his expertise in flood policies, Stewart offered the Denver/Boulder chapter a wealth of information about preparation and response to floods. He explained that UDFCD’s floodplain management program is responsible for preventing new flood damage potential from being introduced into 100-yr floodplains, while encouraging the utilization of nonstructural methods of flood damage mitigation. Along with the management of floodplains, UDFCD has funded a local flood warning program for the past 26 years that provides early flood detection, decision support, and notification services for district local governments. Stewart said that an important component of the program is the ALERT system, which provides real-time measurements of rainfall, stream and reservoir water levels, and weather data from 17 mesonet stations. UDFCD uses this information, along with daily weather forecasts, to assist local governments with anticipating and responding to potential flood threats.

—GENEVIEVE MARICLE
Denver/Boulder chapter

EXPANDING THE CONCEPT OF CLIMATE CHANGE

Roger Pielke, Colorado state climatologist and professor at Colorado State University, spoke to the Southeast Arizona chapter in November about expanding the concept of human-caused climate change. He went into great depth about how the climate system and human disturbance of the climate system is much more complicated and multidimensional than commonly assumed, which may make skillful future prediction of the climate impossible.

Pielke explained that the hydrologic cycle and global averaged temperature have been shown to be increasing. He pointed out that the distribution of existing temperature data lack the needed spatial representativeness, and, at least in initial studies, maximum/minimum temperature sensors recording temperature data for the climate network were poorly located. Pielke said that land use changes in the past 200 years have greatly impacted the local climate in many locations. Another issue impacting climate prediction is that of behavior of snow and sea ice, which Pielke says is much different than what models are predicting.

For more information on this topic, Pielke directed chapter members to the Web site, http://arctic.atmos.uiuc.edu/cryosphere/index.html. A more in-depth look at the articles referenced in this presentation can be found at: http://blue.atmos.colostate.edu/publications.shtml.

—DAWN FISHLER
Southeast Arizona chapter