GG121-14

404.1.1, 404.1.1.1 (NEW)

Proponent: Kent Sovocool, representing Southern Nevada Water Authority (kent.sovocool@snwa.com)

Revise as follows:

404.1.1 Water for outdoor landscape irrigation. Outdoor landscape irrigation systems shall be designed and installed to reduce potable water use by 50 percent from a calculated mid-summer baseline in accordance with Sections 404.1.1 and 404.1.2 or, where permitted by State regulation or local ordinances, the system shall be supplied by municipal reclaimed water or with *alternate onsite nonpotable water* complying with Chapter 7.

Exceptions: Potable water is permitted to be used as follows:

- 1. During the establishment phase of newly planted landscaping.
- 2. To irrigate food production.
- 3. To supplement nonpotable water irrigation of shade trees provided in accordance with Section 408.2.3.
- 4. Potable water is permitted for landscape irrigation where approved by local ordinance or regulation.

Add new text as follows:

404.1.1.1 Mid-summer baseline calculation.

The mid-summer baseline or theoretical peak water demand of a site shall be calculated as follows:

 $\frac{MSB = (ED - P) \times PFT \times 1.6 \times}{ILA}$

Equation 4-1

where:

MSB = The mid-summer baseline in gallons.

<u>ED = The estimated peak demand month's average reference evapotranspirationa demand in inches.</u>

P = The estimated peak demand month's estimated average precipitation in inches.

PFT = The plant factor for turfgrass in accordance with ASABE S623 using cool or warm season turfgrass, whichever is most common to the region. Where the most common turfgrass type is unknown the average of the values for cool and warm season turfgrasses shall be used.

<u>ILA = The installed landscaped area in square feet assuming 100 percent coverage with turfgrass.</u>

Add new standard(s) as follows:

ASABE

ANSI/ASABE S623-XXXX Determining Landscape Plant Water Requirements

Reason: Section 404.1.1 states that irrigation systems must be designed and installed to reduce potable water use 50 percent from a "calculated mid-summer baseline" but gives no guidance as to how this is to be accomplished. The proposal gives clear directions for calculation of this baseline drawing on plant factors developed from an ANSI standard. This assures the intent and integrity of the code is met and allows the *authority having jurisdiction* to verify the requisite baseline without detailed knowledge of water use for individual plants in their area.

The ANSI ASABE S623 standard is in development and should be available by Dec 1, 2014.

Cost Impact: Will not increase the cost of construction.

Analysis: A review of the standard proposed for inclusion in the code, ANSI/ASABE S623-XXXX with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28), will be posted on the ICC website on or before April 1, 2014.

GG121-14: 404.1.1-SOVOCOOL924