

Calculating Irrigation Amounts -LV

- $ETa = I - \Delta S - D$
 - ETa : actual evapotranspiration
 - I : irrigation (l)
 - ΔS : change in storage
 - D : drainage
- Following week: $I = ETa / (1 - LF)$
 - LF : leaching fraction
- $I / ET_o = 1.04 + 1.03 LF, r^2 = 96.4$

DOCKET

09-AAER-1A

DATE _____

RECD. July 01 2009

FIGURE 12. Daily Irrigation Color by N by LF by Time

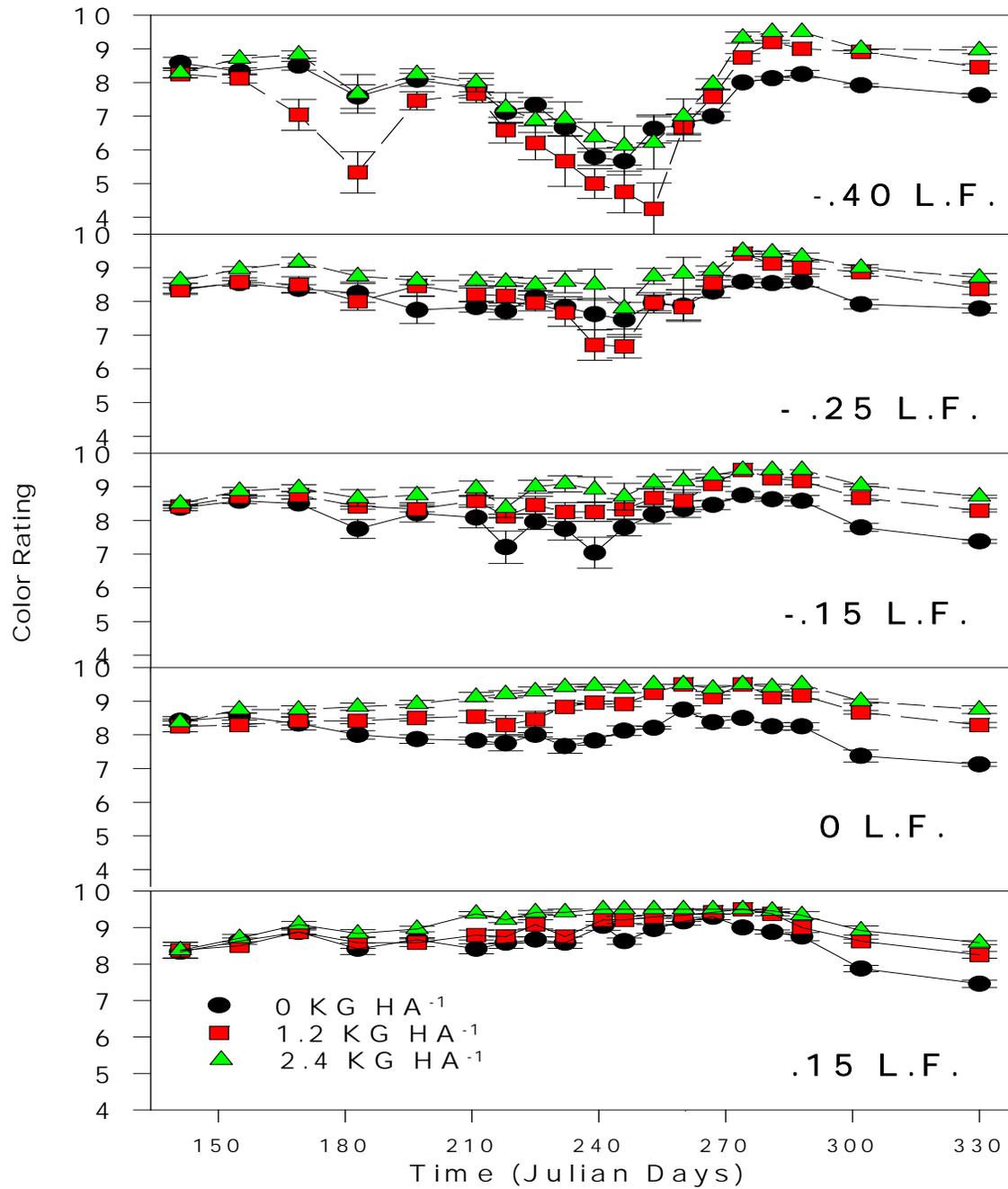
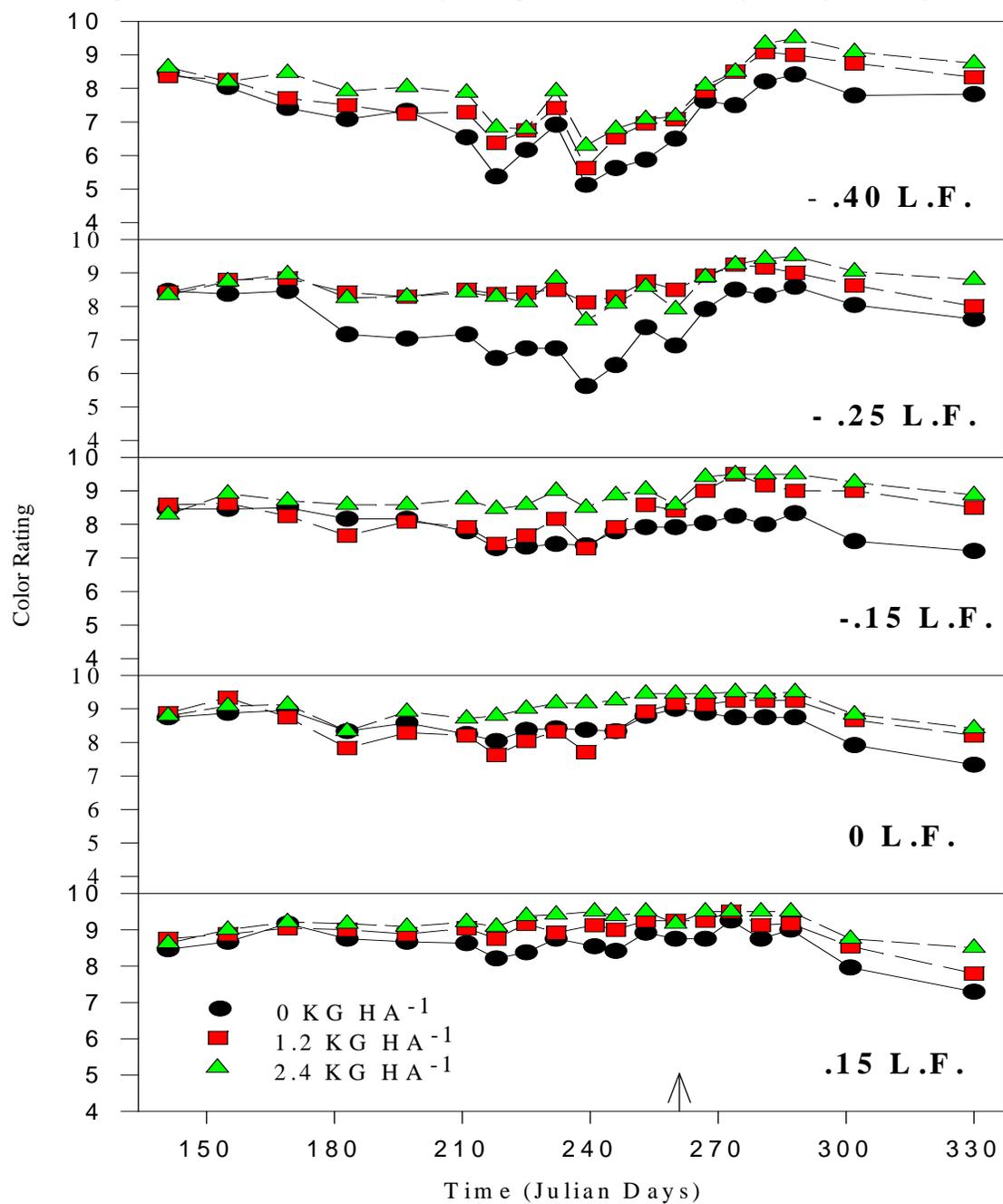
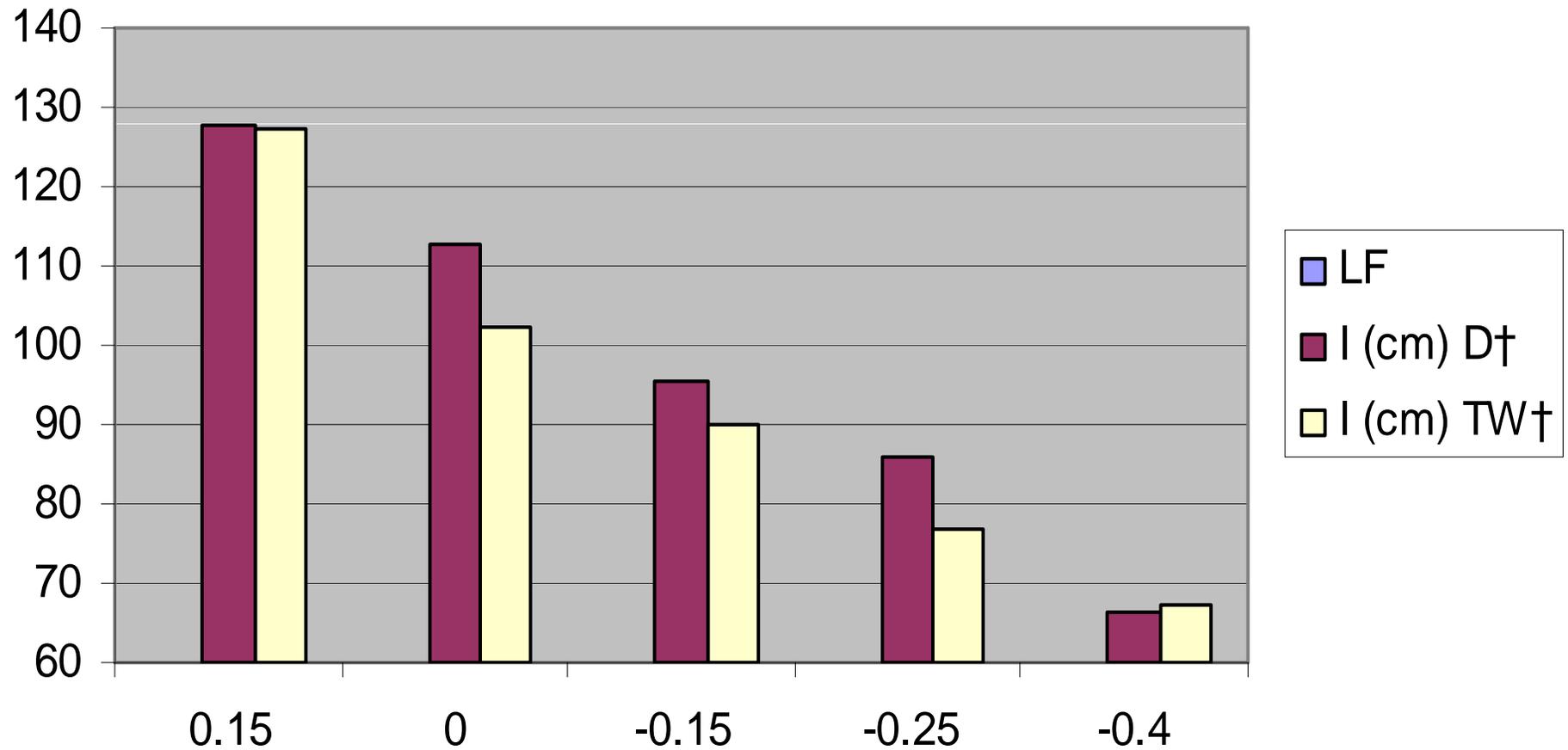


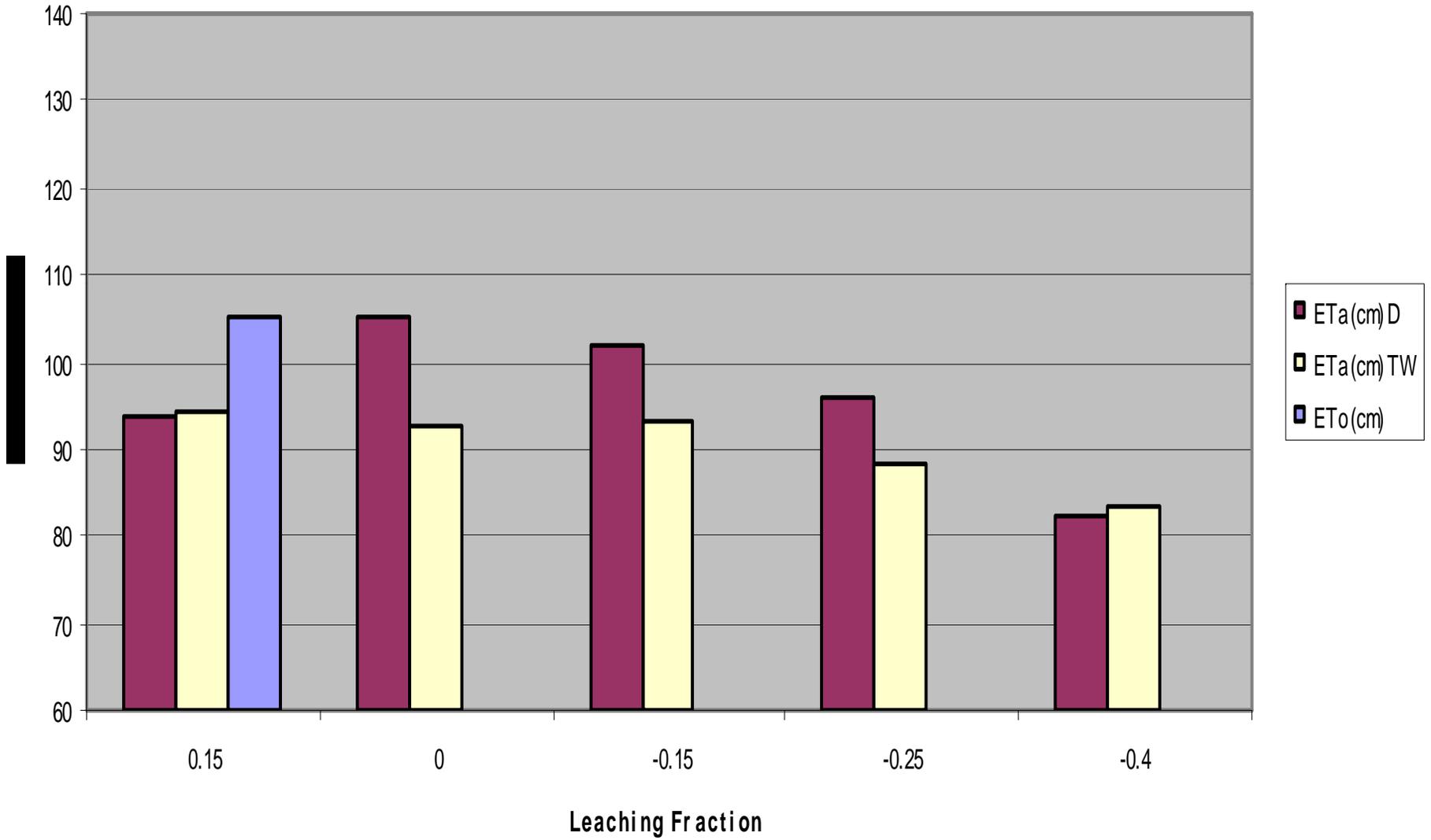
Figure 13. Twice Weekly Irrigation Color by N by LF by Time



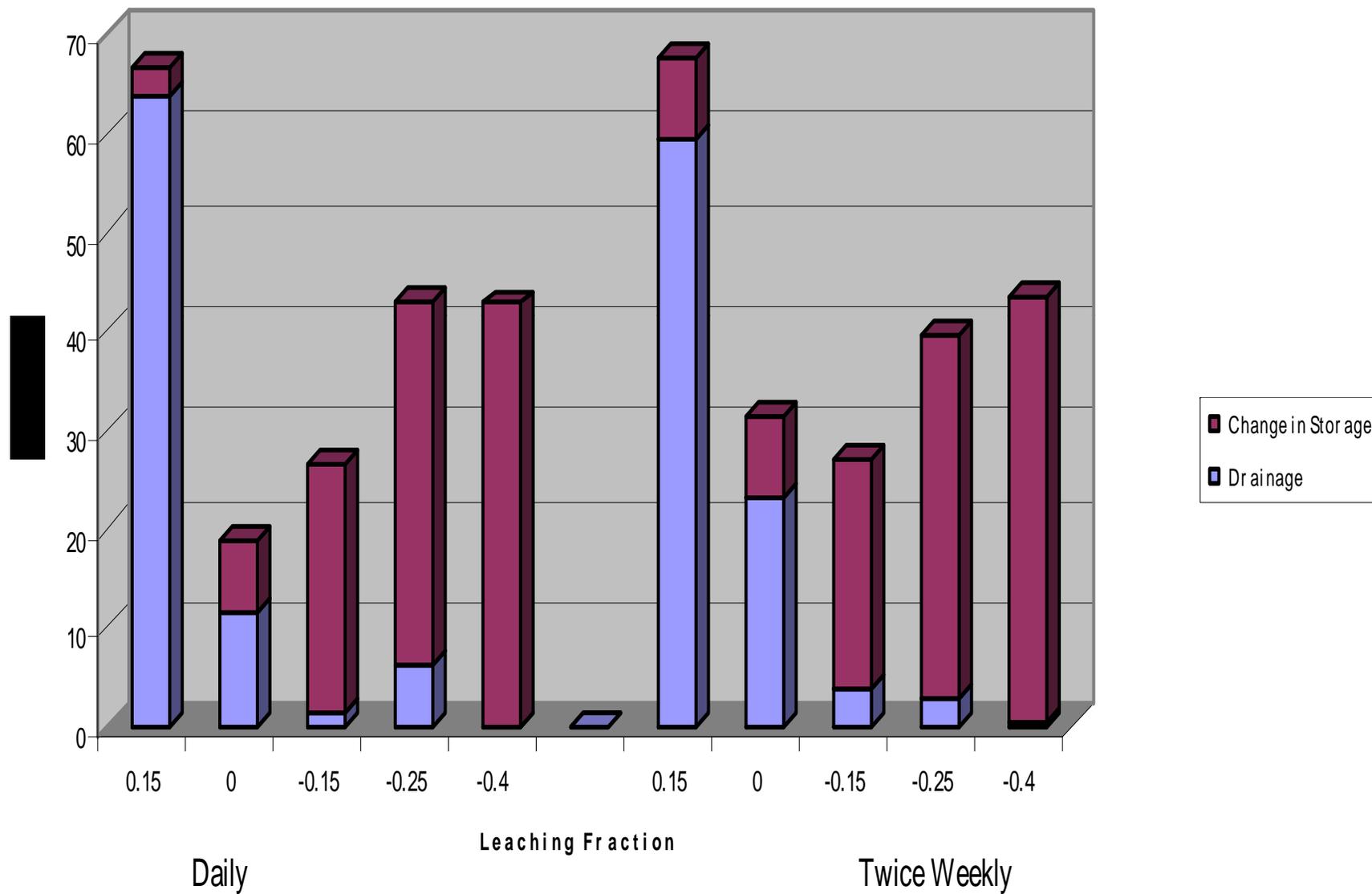
Irrigation by Leaching Fraction



Daily vs Twice Weekly



Drainage and change in storage (I)



Water Savings – Las Vegas

- Twice week watering provides water savings:
 - 10, 5.8 and 11.9% at 0, -0.15 and -0.25LF
- And acceptable turf quality:
 - 8+ Color & 100% Cover
- 0.8 I/ETo deficit irrigation can save 26% to 29% water
- Soil Water Storage at .52 was a threshold for deficit treatments
- Tradeoffs may lead to greater water savings without loss of turf – up to 47% at -0.40LF