APPENDIX F: CONVERSION FACTORS AND EXAMPLE FOR CALCULATING POUNDS NUTRIENT PER ACRE-FOOT OF IRRIGATION WATER

11.3 ppm N = 0.71 Ib. N per 1,000 sq. ft.

50 ppm NO_3^- = 0.71 Ib. N per 1,000 sq. ft.

0.4 ppm P = 0.057 lb. P_2O_5 per 1,000 sq. ft.

1.21 ppm PO_4^- = 0.057 lb. P_2O_5 per 1,000 sq. ft.

0.92 ppm P_2O_5 = 0.057 lb. P_2O_5 per 1,000 sq. ft.

20 ppm K = 1.5 lb. K_2O per 1,000 sq. ft.

24 ppm K_2O = 1.5 lb. K_2O per 1,000 sq. ft.

60 ppm Ca = 3.75 lb. Ca per 1,000 sq. ft

25 ppm Mg = 1.56 lb. Mg per 1,000 sq. ft.

30 ppm S = 1.87 lb. S per 1,000 sq. ft.

90 ppm SO_4^- = 1.87 lb. S per 1,000 sq. ft.

1 acre = 43,560 sq. ft.

Example: Irrigation water has 15 mg/L NO_3^-

15 mg/L $\qquad\qquad$ = (15)(0.226 mg/L N)

$\qquad\qquad\qquad\qquad\qquad$ = 3.39 mg/L as N

lb N per acre-foot of water $\quad$ = (mg/L of N)(2.72)

$\qquad\qquad\qquad\qquad\qquad$ =(3.39 mg/L of N)(2.72)

$\qquad\qquad\qquad\qquad\qquad$ =9.22 lb N per acre-foot water

Or, 9.22/43.56 = 0.21 lb N per 1000 sq. ft. per 12 in. irrigation water