

Corrections for
Water Resources Engineering
(Third printing)
By Larry W. Mays

Corrections as of 4/29/03

If you find additional corrections please email me at mays@asu.edu

Preface

Page vi Last sentence in the web address, “publiz” should be “public”

Chapter 4

Page 74 Figure 4.5.2, “ $z_1 - z_2 = 15$ ” should be “ $z_1 - z_2 = h_{Lf}$ ”

Page 79 Equation 4.5.8, “ V^2_{AB} ” should be “ V^2_{AD} ”

Chapter 5

Page 93 Table 5.1.2, under column for Trapezoid the “ B_w ” should be “ B_w ” in the expressions for wetted perimeter and hydraulic radius

Page 117 Table 5.4.1 footnote “ $h_o = C_c$ ” should be “ $h_o = C_e$ ”

Page 119 Add the following sentence to the problem description, “Distance between cross-sections 1 and 2 is 500ft, between cross-sections 2 and 3 is 400 ft, and between cross-sections 3 and 4 is 400 ft.”

Page 123 Table 5.4.2, first line of second footnote “ $h_o = C_e$ ” should be “ $h_o = C_e$ ”

Table 5.4.2, second line of the second footnote “ $h_o = C_e$ ” should be “ $h_o = C_c$ ”

Page 124 Line above equation (5.5.5), “Alternatively, $Q = B^2 y_2^2 V_2^2$ ” should be “Alternatively, $Q = B y_2 V_2$ ”

Page 125 Example 5.5.3, third line above equation at bottom of page, “Because $y_n < y_c < 8$ ft, a supercritical flow ...” should read “Because $y_n < y_c < 8$ ft, a subcritical flow ...”

Chapter 6

Page 141 Section 6.1, sixth line, “slit” should be “silt”

- Page 148 Fourth line from bottom of page, “diameter,” should be “diameter),”
- Page 152 Equation 6.2.14, in denominator “z” should be “x”
- Page 163 Line above equation 6.5.2 should read “solve for the *drawdown* s given as”
- Page 164 Add the following after equation 6.5.5, “ where Q is m³/day and T is m²/day for s in m; or Q is gal/day and T is gpd/ft for s in ft; or Q is ft³/day and T is ft²/day for s in ft.”
- Page 165 Sentence above equation 6.5.9, after S add “,using time-drawdown data,”
- Figure 6.5.2 curves in this figure should be changed to reflect log 1/u on the x-axis so that all curves increase from left to right instead of decrease.
- Page 169 Last line → 366.700 should be 366,700
- Page 170 Step 7, “366.700” should be “366,700” and “t ≥ 12.6 min” should be “t ≥ 25.3 min”.
- Page 173 Line after equation (6.6.3), “ $? = r^2 k_z / b^2 k_r$ ” should be “ $? = r^2 K_z / b^2 K_r$ ”
- Page 174 Equation (6.7.3) denominator in radical “Kb’_b” should be “Kbb”
- Page 176 In Figure 6.8.2, the arrow for the recharge well should be point downward.
- Page 189 Second line of Problem 6.8.5 statement “...two barrier boundaries was ...” should read “... two barrier boundaries perpendicular to each other was ...”
- Chapter 7**
- Page 222 In Table 7.2.2, “P_t/P₂₄” should be “P_t/P₂₄”
- Page 230 Line above equation (7.3.7), “(dz/dt (0))” should be “(dz/dt = 0)”
- Page 236 Equation 7.4.14 should have minus sign after the first equal sign
- Second line of solution “ $? = [-65+-(60)]/2$ ” should be “ $? = [-65+(-60)]/2$ ”
- Page 244 Figure 7.4.9, in figure for the F – index delete the f_o and f_c
- Chapter 8**

- Page 256 Column (2) under Unit Hydrograph, “(cfs/m)” should be “(cfs/in)”
- Page 282 Problem 8.7.2, “ soil groups of B, C, and D. “ should read “soils groups of B, C, D, and B. “
- Problem 8.7.5, add the following “The rainfall pattern is 1.5 in during the first hour, 2.5 in during the second hour, and 1.0 in during the third hour. “
- Problem 8.7.6, add the following “The rainfall pattern is 2.0 in during the first hour, 3.0 in during the second hour, and 2.0 in during the third hour. “
- Problem 8.8.2, “ controlled “ should be “contoured “
- Page 299 Equation (9.5.12), the first = should be +

Chapter 9

- Page 307 Problem 9.1.1, “Storage (106 m^3) “ should be “ Storage (10^6 m^3) “ and “Outflow (m^3)” should read “Outflow (m^3/s)”
- Problem 9.2.1, “ characteristics given in problem 3.6.1 “ should be “ characteristics given in problem 9.1.1 “
- Problem 9.2.1, “ 106 m^3 “ should be “ 10^6 m^3 ”
- Problem 9.2.4, “ example 9.1.1 ” should be “ example 9.2.1 “
- Problem 9.2.5, “ example 9.1.1 ” should be “ example 9.2.1 “
- Problem 9.2.6, “ example 9.2.2 “ should be “ example 9.3.2 “
- Problem 9.2.7, “ example 9.2.2 assuming $X = 0.3 \text{ hrs}$ “ should be “ example 9.3.2 assuming $X = 0.3$ “
- Problem 9.3.1, “ example 9.2.2 “ should be “ example 9.3.2 “
- Page 328 Equation (10.5.8), delete the overbar on y_H and place an overbar on y
Equation (10.5.9), delete the overbar on y_L and place an overbar on y

Chapter 12

- Page 419 Equation 12.1.5, “f” should be same as the Greek symbol in the next line of text.
- Page 428 Third line below equation (2.2.8), “ h_{Lp} ” should be “ h_{Lf} ”

Page 443 Figure 12.4.3, h_f extends up to the HGL

Page 446 Figure 12.5.3, the combined system curve needs to be shown.

Page 451 Second line of Example 12.5.1, “Figure 12.5.16” should read “Figure 12.5.13 (a)”
Sixth line of Example 12.5.1, “Figure 12.5.13” should read “Figure 12.5.13 (b)”
“Figure 12.5.16” at bottom of page should read “Figure 12.5.13 (a)”

Page 452 First line of Example 12.5.2, “Figure 12.5.13” should read Figure 12.5.13 (b)”

Page 453 “Figure 12.5.13” should be “Figure 12.5.13 (b)”

Chapter 12

Page 468 Example 12.6.3, first line after the conservation equations, “All 12 of the conservation” should be “Only 11 of the 12 conservation”

Page 478 Part a of solution for Example 12.8.1, $v_c = \dots = 1473 \text{ m/s}$

Page 478 Part a of solution for Example 12.8.1, $V = Q/A = (400 \times 10^{-3})/\dots$

Chapter 13

Page 522 First line of Problem 13.1.1, “Figure 13.1.3a ‘ should be “Figure 13.1.17a”

First line of Problem 13.1.2, “Figure 13.1.3b ‘ should be “Figure 13.1.17b”

Chapter 14

Page 545 Line above equation 14.4.2, “Figure 14.4.1” should be “Figure 14.4.2e”

Page 558 Figure 14.6.4, “(annual = 22°)” should be “(annual = 22 inches)” and “(annual = 51°)” should be “(annual = 51 inches)”

Chapter 15

Page 565 Table 15.2.3, The C factor for a 10-yr return period Forest/Woodlands should be “0.36” instead of “0.26”

Page 596 First line of subsection 15.3.2, “vegetable linings” should be “vegetative linings”

Page 609 Equation 15.4.12, “ $(t_D + t_c)$ ” should be “ $(t_D + t_c)$ ”

Chapter 16

Page 654 Table 16.2.1, Heading in the Table “Monograph Scale” should read “Nomograph Scale”

Page 655 same as above

Page 660 Figure 16.2.6, at section 2 the top “ H_o ” should be “ H_e ”

Page 662 Third line from the bottom of the page (line with starting with Step 8) delete, “where”

Page 664 First line, “4.69” should be “4.64”

Page 664 **3rd line → Need new paragraph after “...above equation for EL_{h0} .”**
SPACE

The new paragraph starts with “*Now consider inlet control and ...*”

Also, after the line “*To check,*”

$$\left[\frac{Q^2}{AD^{0.5}} \right] \text{ should be } \left[\frac{Q}{AD^{0.5}} \right]$$

Page 693 Figure 17.2.20 title should be “Culvert spillway for Dulce Reservoir dam under construction in northern New Mexico (Photograph by L. W. Mays)”

Chapter 17

Page 707 Figure 17.3.2, 0+00 is located at the upstream side of the channel trough

Page 708 Figure 17.3.14, “Hydraulic gradient” should be “Hydraulic gradient”

Page 729 Equation for $x =$, six lines above Example 17.4.2, there appears 29 twice which in both cases should be 2g

Page 731 Example 17.4.3, energy equation which is fifth line in the solution, the “19.3” should be “4.15”

Page 746 Problem 17.4.4, “Example 17.4.1” should be “Example 17.4.2”
Problem 17.4.5, “Example 17.4.1” should be “Example 17.4.3”
Problem 17.4.6, “Example 17.4.1” should be “Example 17.4.4”
Problem 17.4.4, “Example 17.4.1” should be “Example 17.4.5”

Appendix A

Page 751 First sentence on page, “Table 5.2.1”, should be “Table 5.1.2”