# RESERVOIR CAPACITY COMPUTATION SHEET RANGE METHOD

_____
NAME OF RESERVOIR

SHEET ____ OF ____

$V = A^1/3\ (E_1+E_2)/(W_1+W_2) + A/3\ (E_1/W_1+E_2/W_2) + h_3/E_3/130{,}680 +$ _____

$V = V_1 + V_2 + V_3$ _____

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | | SEGMENT NO. | GENERAL | | | | | |
| 2 | | RANGE 1 | | | | | | |
| 3 | | RANGE 2 | | | | | | |
| 4 | | $W_1$ | | | | | | |
| 5 | | $W_2$ | | | | | | |
| 6 | (4)+(5) | $W_1+W_2$ | | | | | | |
| 7 | (6)X3 | $3(W_1+W_2)$ | | | | | | |
| 8 | | $h_1$ | | | | | | |
| 9 | | $h_2$ | | | | | | |
| 10 | (4)X(8) | $h_1W_1$ | | | | | | |
| 11 | (5)X(9) | $h_2W_2$ | | | | | | |
| 12 | (10)X(11) | $2A^1$ | | | | | | |
| 13 | (12)÷87,120 | $A^1$ | | | | | | |
| 14 | | A | | | | | | |
| 15 | (14)÷3 | 1/3A | | | | | | |
| 16 | | $h_3$ | | | | | | |
| 17 | (16)÷130,680 | $h_3/130{,}680$ | | | | | | |
| 18 | | | ORIGINAL CAPACITY | | | | | |
| 19 | | $E_1$ | | | | | | |
| 20 | | $E_2$ | | | | | | |
| 21 | (19)+(20) | $E_1+W_2$ | | | | | | |
| 22 | (21)÷(7) | $1/3\ \frac{(E_1+E_2)}{(W_1+W_2)}$ | | | | | | |
| 23 | (19)÷(4) | $E_1/W_1$ | | | | | | |
| 24 | (20)÷(5) | $E_2/W_2$ | | | | | | |
| 25 | (23)÷(24) | $(E_1/W_1+E_2/W_2)$ | | | | | | |
| 26 | | $E_3$ | | | | | | |
| 27 | (13)X(22) | $V_1$ | | | | | | |
| 28 | (15)X(25) | $V_2$ | | | | | | |
| 29 | (17)X(26) | $V_3$ | | | | | | |
| 30 | (27)+(28)+(29) | V | | | | | | |
| 31 | | | SILT VOLUME | | | | | |
| 32 | | $E_1$ | | | | | | |
| 33 | | $E_2$ | | | | | | |
| 34 | (32)+(33) | $E_1+E_2$ | | | | | | |
| 35 | (34)÷(7) | $1/3\ \frac{(E_1+E_2)}{(W_1+W_2)}$ | | | | | | |
| 36 | (32)÷(4) | $E_1/W_1$ | | | | | | |
| 37 | (33)÷(5) | $E_2/W_2$ | | | | | | |
| 38 | (36)+(37) | $(E_1/W_1+E_2/W_2)$ | | | | | | |
| 39 | | $E_3$ | | | | | | |
| 40 | (13)X(35) | $V_1$ | | | | | | |
| 41 | (15)X(38) | $V_2$ | | | | | | |
| 42 | (17)X(39) | $V_3$ | | | | | | |
| 43 | (40)+(41)+(42) | V | | | | | | |
| 44 | | | | | | | | |