



Town of Hillsborough
Water Efficiency in Landscaping
WATER BUDGET CALCULATION WORKSHEETS

An Excel Spreadsheet Version of this Worksheet Can Be Found on the Town's Website:

http://www.hillsborough.net/depts/building/planning/informational_handouts.asp

SECTION A. HYDROZONE INFORMATION TABLE

Please complete the hydrozone table(s) for each hydrozone. Use as many tables as necessary to provide the square footage of landscape area per hydrozone.

Hydrozone (a)	Zone or Valve Number	Irrigation Method (b)	Area (Sq. Ft.)	Percent (%) of Landscape Area
Total				100%

(a) Hydrozone:

HW = High Water Use Plants
MW = Moderate Water Use Plants
LW = Low Water Use Plants

(b) Irrigation Method:

MS = Micro-spray O = Other
S = Spray D = Drip
R = Rotor B = Bubbler
B = Bubbler

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SECTION B. WATER BUDGET CALCULATIONS

Section B1. Maximum Applied Water Allowance (MAWA)

The project's Maximum Applied Water Allowance shall be calculated using this equation:

$$\text{MAWA} = (\text{ETo}) (0.62) [(0.7 \times \text{LA}) + (0.3 \times \text{SLA})]$$

where:

MAWA = Maximum Applied Water Allowance (gallons per year)

ETo = Reference Evapotranspiration (inches per year)

0.62 = Conversion factor (to gallons per square foot)

0.7 = ET Adjustment Factor (ETAF)

LA = Landscaped Area includes Special Landscape Area (square feet)

0.3 = the additional ET Adjustment Factor for Special Landscape Area ($1.0 - 0.7 = 0.3$)

SLA = Portion of the landscape area identified as Special Landscape Area (square feet)

Maximum Applied Water Allowance = _____ gallons per year

Show calculations.

Effective Precipitation (Eppt)

If considering Effective Precipitation, use 25% of annual precipitation. Use the following equation to calculate Maximum Applied Water Allowance:

$$\text{MAWA} = (\text{ETo} - \text{Eppt}) (0.62) [(0.7 \times \text{LA}) + (0.3 \times \text{SLA})]$$

Maximum Applied Water Allowance = _____ gallons per year

Show calculations.

SECTION B. WATER BUDGET CALCULATIONS

Section B2. Estimated Total Water Use (ETWU)

The project's Estimated Total Water Use is calculated using the following formula:

$$ETWU = (ET_o)(0.62) \left(\frac{PF \times HA}{IE} + SLA \right)$$

where:

ETWU = Estimated total water use per year (gallons per year)

ET_o = Reference Evapotranspiration (inches per year)

PF = Plant Factor from WUCOLS

HA = Hydrozone Area [high, medium, and low water use areas] (square feet)

SLA = Special Landscape Area (square feet)

0.62 = Conversion Factor (to gallons per square foot)

IE = Irrigation Efficiency (minimum 0.70)

Hydrozone Table for Calculating ETWU

Please complete the hydrozone table(s). Use as many tables as necessary.

[illegible]

Estimated Total Water Use = _____ gallons

Show calculations.

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