

North Carolina  
Central Piedmont  
(Raleigh Area)

## TURFGRASS IRRIGATION REQUIREMENTS



MONTH	AVERAGE RAINFALL INCHES	GROSS IRRIGATION REQUIRE- MENTS
JAN.	3.63	-
FEB.	3.44	-
MAR.	3.79	-
APRIL	2.88	1.83
MAY	3.64	3.38
JUNE	3.54	5.11
JULY	4.51	5.35
AUG.	4.33	4.57
SEPT.	3.70	3.01
OCT.	2.94	1.38
NOV.	2.90	-
DEC.	3.01	-
<b>TOTAL</b>	<b>42.14</b>	<b>24.63</b>



Soil & Water

## MISSION STATEMENT

To conserve, enhance and promote the natural resources of Durham County by providing technical assistance, environmental education information, and economical incentives to county citizens and by exhibiting a diversified program to meet its changing needs.

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# PROTECT & CONSERVE



*Durham's  
Water Resources*

Durham Soil & Water  
Conservation District

721 Foster Street  
Durham, NC 27701

Phone: 919-560-0558

<http://www.dconc.gov/index.aspx?page=571>

# HOW MUCH?

*Do you need*



Experts agree that plants need one inch of water per week.

## HELPFUL TERMS

**Evapotranspiration rate** - The rate in which plants lose water into the atmosphere.

**Microclimate** - Different climatic areas within a site, due to soil type and sun exposure.

**Infiltration rate** - The rate that water percolates into the soil.

**Field holding capacity** - Maximum amount of water holding capacity of a soil type.

**Wilt stress** - Desiccation of foliage. In turf, a footprint may remain visible for one hour.

**Permanent wilting point** - Point in which a plant will not recover from wilt stress.

## WAYS TO SAVE WATER

*Irrigation and Water Conservation*

*Methods that improve irrigation efficiency:*



- \* Allow the soil to dry to 50% between waterings. (A moisture meter is an effective tool for measuring the soil moisture level.)
- \* Water between 12PM and 9AM.
- \* Do not apply water at a rate that creates runoff.
- \* Monitor rainfall using a rain gauge. Supplement rainfall with irrigation.
- \* Know your irrigation system. Use a rain gauge to calibrate your system.



## HOW TO CALCULATE WATER REQUIREMENTS

1. Develop a site plan -- find a copy of your residential survey and measure the turf and bed areas. Record the measurement in square feet.
2. Divide the areas into microclimates. If you have separate irrigation zones, draw them on your schematic.
3. Determine the weekly water needs by monitoring your rain gauge and record moisture readings. Use the Turfgrass Irrigation Requirements Chart on the back to determine the application rate in inches of rainfall per zone through the growing season.

NOTE: One inch of rainfall, applied per 1000 sq. ft. is equal to 625 gallons of water.