

TAKE CONTROL

HOW TO USE A STANDARD IRRIGATION CONTROLLER



**MARK GUTHRIE
WATER PROGRAM SPECIALIST**

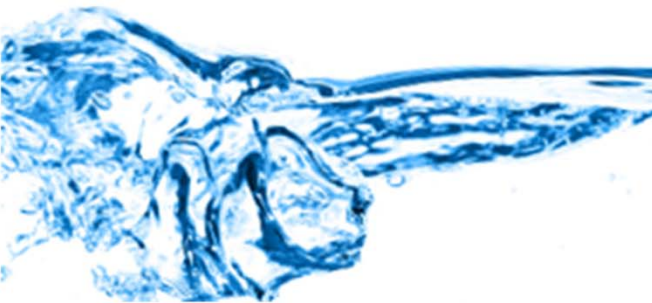
FEBRUARY 25, 2015

STORY



OBJECTIVES

1. WHEN TO USE MULTIPLE PROGRAMS
2. WHEN TO USE MULTIPLE START TIMES
3. WHAT IS RAIN DELAY? A RAIN SENSOR?
4. HOW TO USE SEASONAL ADJUST
5. WHEN TO REDUCE RUNTIMES



PURPOSE FOR CONTROLLERS

- GIVE PLANTS WATER WHEN NOT RAINING
- CHOICE IN WHEN & HOW OFTEN TO WATER
- HELP IMPROVE SUCCESS
 - Aesthetics, food & less effort



BEFORE YOU TOUCH THE CONTROLLER ...

1. KNOW HOW MUCH WATER PLANTS NEED

PLAN TYPE

- SHRUBS
- GROUNDCOVER
- TURF
- TREES
- NATIVE PLANTS
- ADAPTED PLANTS

RESOURCES

- WESTERN GARDEN BOOK
- WSU EXTENSION MASTER GARDENERS
- MANY BOOKS ON NATIVE PLANTS OF PNW
- GREATPLANTPICKS.ORG



WHAT INFLUENCES PLANT THIRST?

- SOIL TEXTURE
- PLANT PHYSIOLOGY
- SUN EXPOSURE
- COMPETITION



TYPES OF IRRIGATION CONTROLLERS



STANDARD IRRIGATION CONTROLLER



CONTROLLER SETTINGS - PROGRAMS

1. PROGRAMS = HOW OFTEN TO IRRIGATE

- NOT ALL PLANTS NEED THE SAME AMOUNT OF WATER
 - High vs. low maintenance
 - Short vs. deep roots
 - Right vs. wrong microclimate
 - Adapted vs. non-adapted plants



CONTROLLER SETTINGS - PROGRAMS

GUESS HOW OFTEN ...



10



CONTROLLER SETTINGS - PROGRAMS

GUESS HOW OFTEN ...



Fragaria chiloensis – Coastal Strawberry



3 ELEMENTS OF CONTROLLER PROGRAMS

1. FREQUENCY

2. START TIMES

3. RUNTIMES



3 PROGRAMS ON CONTROLLERS

1. PROGRAM A = WATERS 3+ DAYS/WK.
2. PROGRAM B = WATERS 1-2 DAYS/WK.
3. PROGRAM C = WATERS 1 TIME EVERY 2 WEEKS OR LESS



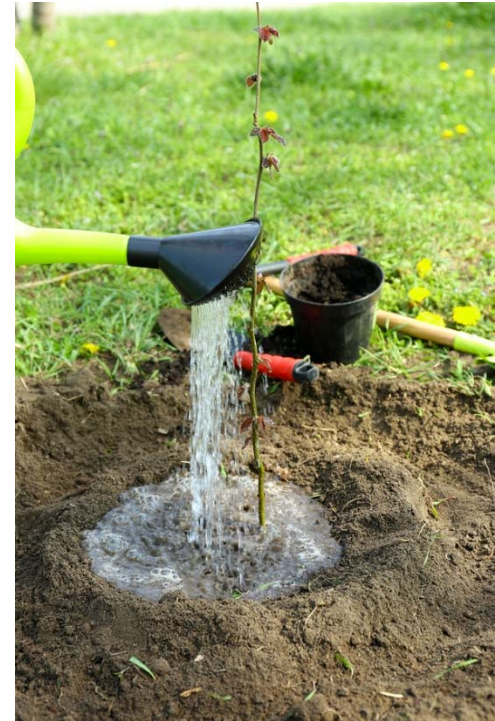
CONTROLLER START TIMES

TYPICAL START TIMES

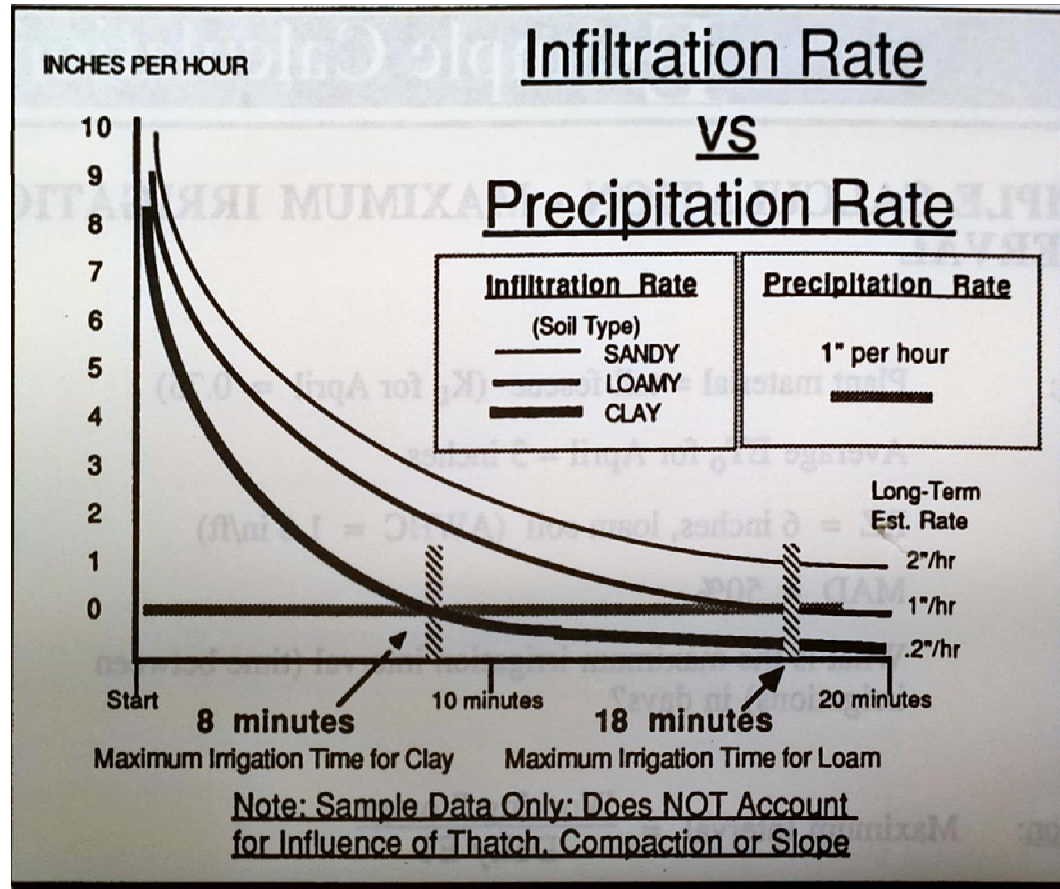
- 1 - 3
- 4+ ON LARGER CONTROLLERS

WHY?

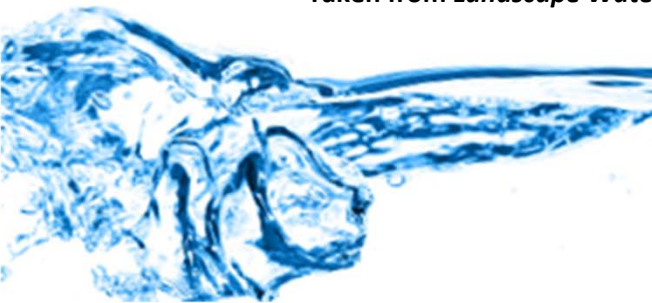
- TURF ESTABLISHMENT
- LOW INFILTRATION/PRECIPITATION RATES, SLOPES



CONTROLLER START TIMES



Taken from *Landscape Water Management Principles*, The Irrigation Training and Research Center, 2004, pg. 19



RAIN DELAY VS. SENSOR

RAIN DELAY

- MANUAL ON/OFF

RAIN SENSOR

- AUTOMATIC DELAY



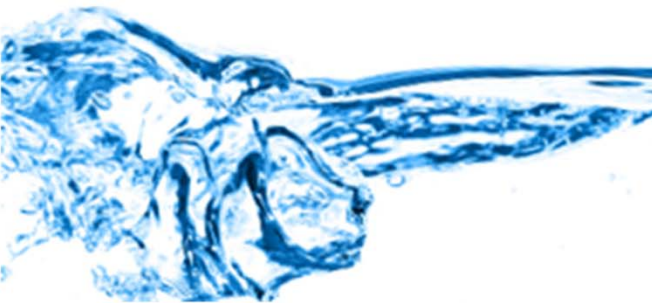
4 THINGS TO KNOW ABOUT RAIN SENSORS

1. WIRELESS

2. WIRED

3. INSTALLATION
LOCATION

4. TESTING &
MAINTENANCE



3 STEPS TO USING THE SEASONAL ADJUST/WATER BUDGET FEATURE

- A PERCENTAGE (%)
 - BASED ON WATER LOSS
1. SET RUNTIMES FOR THE HOTTEST TIME OF YEAR
 2. FIND THE IRRIGATION INDEX (WWW.IWMS.ORG)
 3. ADJUST SEASONAL ADJUST/WATER BUDGET



REGARDING RUNTIMES ...

GUIDELINE:

- ESTIMATE RUNTIMES USING TOOLS ON WWW.IWMS.ORG



HAND'S ON TIME – 20 TO 30 MINUTES

TO BE CONTINUED ...



LESSONS LEARNED?



REDUCE RUNTIMES

1. WHEN USING ESTABLISHED PLANTS

- Plant during Fall to take advantage of rain

2. WHEN USING NATIVE PLANTS

- Proper planting
- Expectations

3. WHEN IN DOUBT ...

- Reduce runtimes by 2 min.
- Allow a small amount of stress to plants in healthy soil
 - Can cause roots to grow deeper



REMINDER

- **SPOTTY PLANT STRESS AREAS MAY BE FROM UNEVEN DISTRIBUTION OF WATER, NOT BY LACK OF WATER OR LOW RUNTIMES**



QUESTIONS?

MARK GUTHRIE

WATER PROGRAM SPECIALIST

(253) 396-3152

MGUTHRIE@CITYOFTACOMA.ORG



GREEN GARDENING PROGRAM WINTER WORKSHOP 2015


Thank you for participating!

Sign out for CEUs – ISA, CPH, ecoPRO

Turn in evaluation surveys

**GREEN
GARDENING
PROGRAM**

Seattle
Public
Utilities

 Local Hazardous Waste
Management Program
in King County

TACOMA WATER
TACOMA PUBLIC UTILITIES



Saving Water Partnership
Seattle and Participating area Water Utilities


CASCADE
WATER ALLIANCE