

Irrigating with a water-wise landscape

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**Smart Outdoor
Services**

Save Water. Save Money. Smart.

Amanda Griffin

- LI # 10969
- Certified Irrigation Contractor
- Certified Landscape Irrigation Auditor
- EPA WaterSense Partner
- Certified Teacher
- Executive Director, Texas Turf Irrigation Association
- 21 years experience in the green industry
 - Irrigation Manufacturing
 - Irrigation contracting
 - Auditing and Consultation

What is going on here?

- Irrigating a WaterWise Landscape
- Irrigation Components
- Guilt release of watering a landscape
- WaterWise irrigation options for retrofit

WaterWise Irrigation

It does exist!

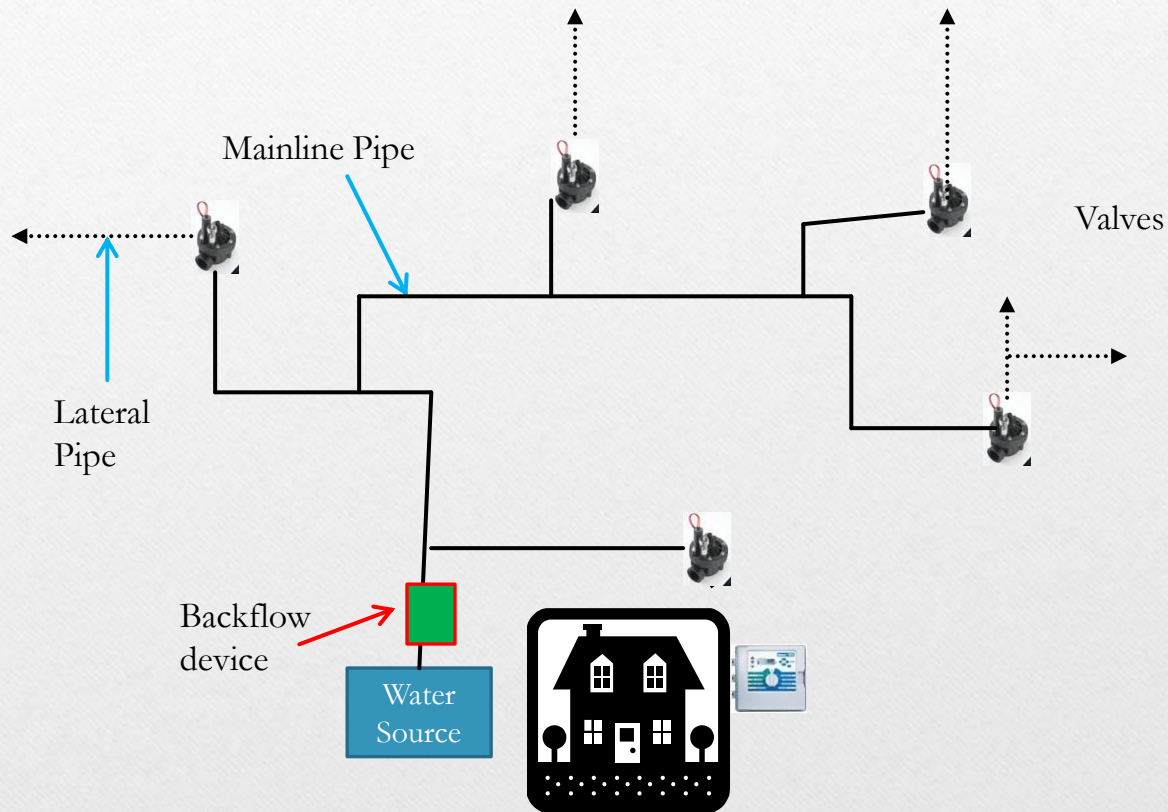
Knowing is half the battle (and talking about it is the other half)

- Conservation
- Vs Efficiency
- Vs Curtailment
- Education
 - Basic irrigation education
 - Efficiency layer of education on top of that

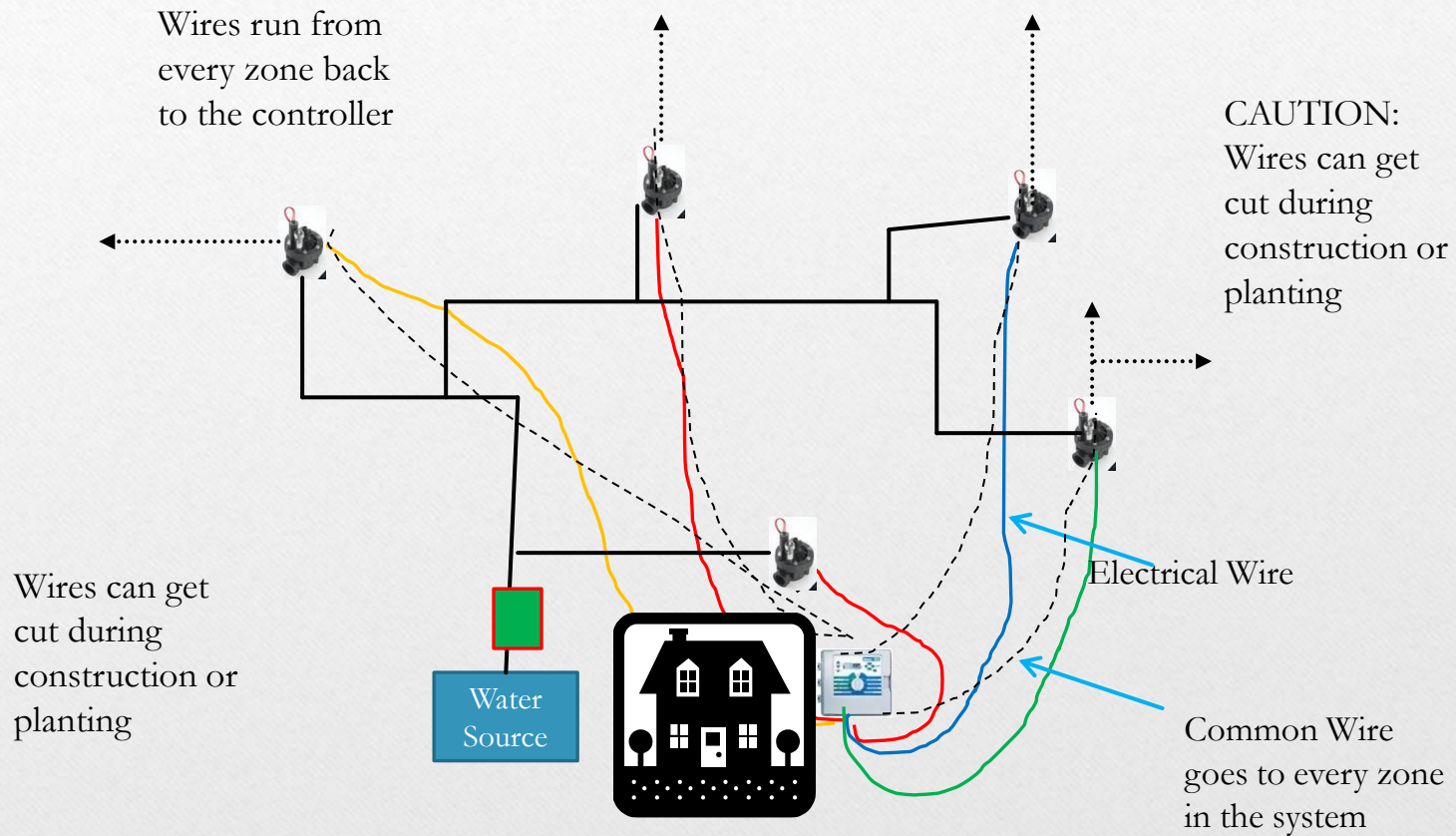
Efficiency vs Uniformity

- Uniformity is how consistent your application is across the zone
 - Measured in a % called DU
 - Catch can data will tell you what your plants already know
- Efficiency is how your system is utilized to water the least with what you've got
 - Uniform + Efficient = Maximum savings

A Typical Irrigation System-hydraulic

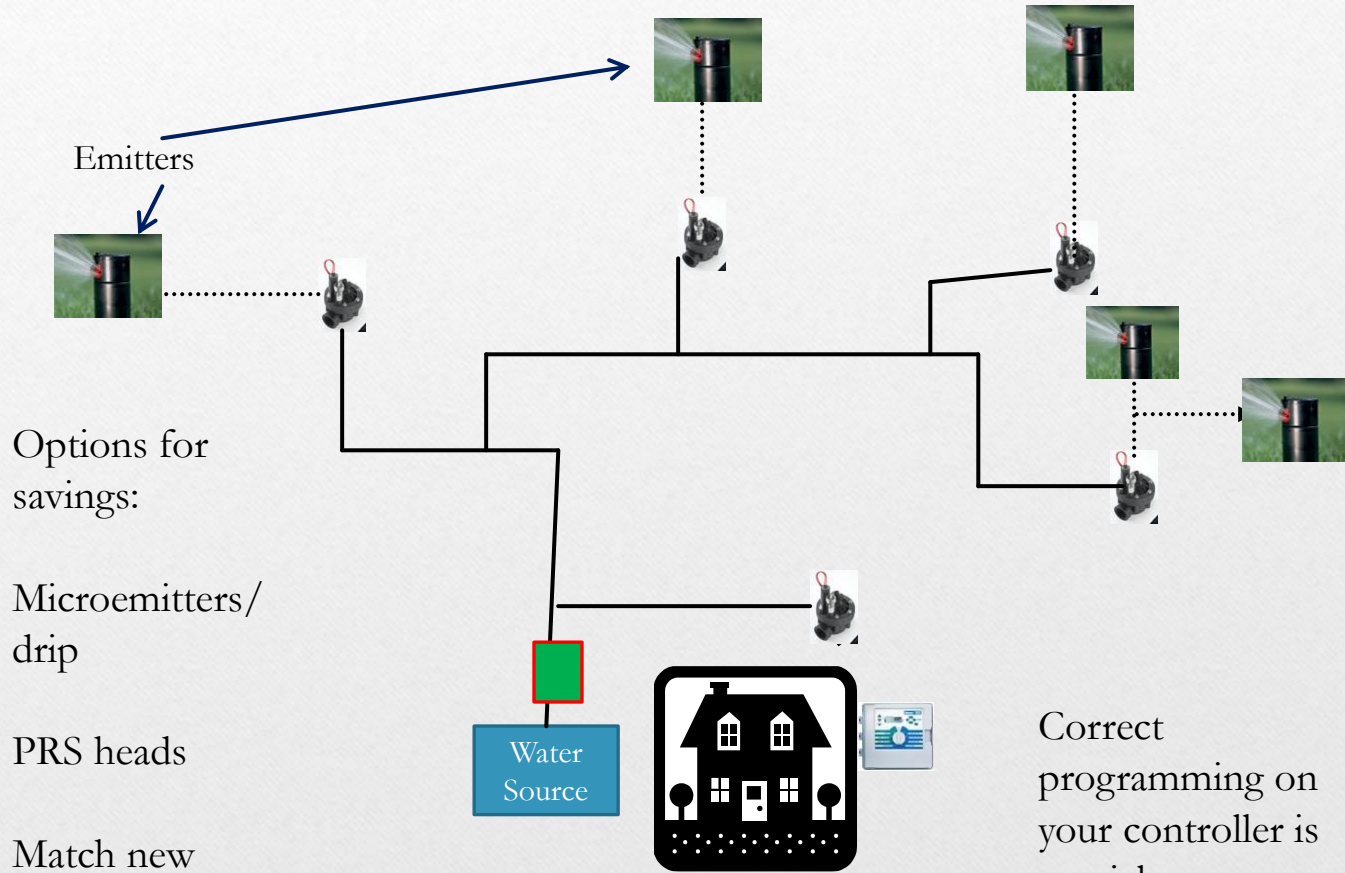


Electricity in the Sprinkler System



DID I MENTION that wires can get cut during construction or planting???

Emitters



Emitters

Options for savings:

Microemitters/
drip

PRS heads

Match new
landscape

Correct
programming on
your controller is
crucial

Emitters



Rotary Nozzles on a spray head



Spray Head

Upgrade options: Check Valves, Pressure Regulation, Matched Precip nozzles, specialty nozzles, just NEW nozzles

Rotor Head



And now I shall preach to the choir...

- Proper planting makes all the difference
 - Prep your sprinkler system for new plants—30%
 - Plant Choice –species AND location AND grouping
 - Soil prep
 - Mulch, mulch, mulch
 - Avoid the crown of the plant

Inconvenient Truth

- You can't train off a bad diet
- Irrigation Translation:
- You can't out conserve a crappy plant palette

Irrigation Scheduling

- Good scheduling is a good idea for any landscape
- Utilizing the features on your controller can save money, water, and make your life easier
- Use the manual, online resources, or your irrigation professional to learn your individual controller
- S=S
- P=P

$$P=P$$



$$P=P$$

-
- Programs are for Plants
 - Turf program, bed program, shade program, waterwise bed program, etc
 - The number of days you water in a week
 - Watering days and times should match water need of plants

Zone run times

- How many minutes of water you apply at one time.
- Depends on
 - type of plant
 - soil type
 - Efficiency condition of system
 - application rate of nozzles

$$S=S$$

Start Times are for SOILS

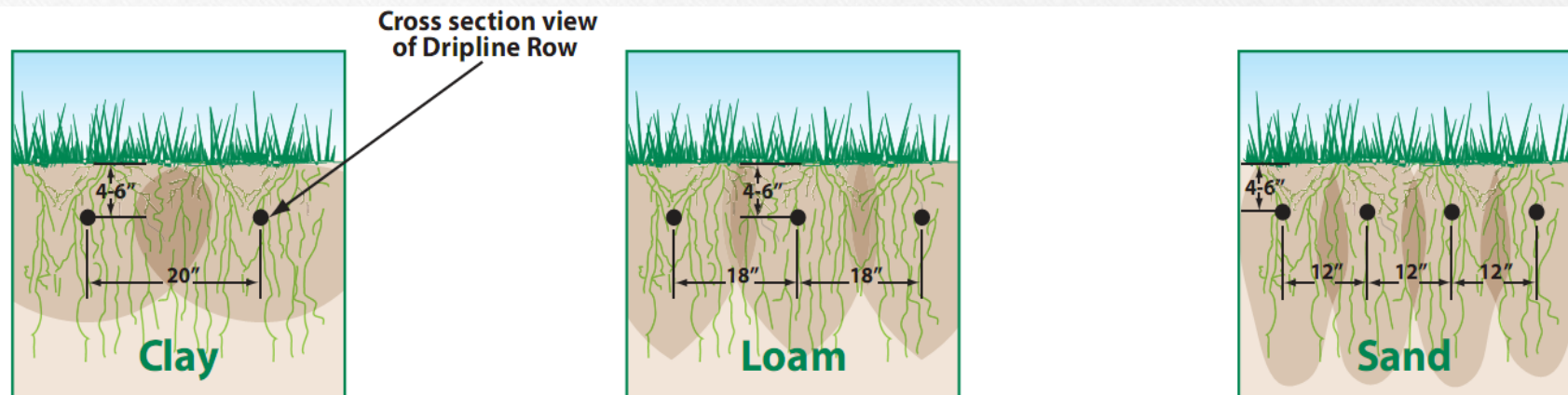
- Most local soils can handle maximum 5 minutes of water at a time
- Typical protocol is every start time runs the number of minutes on your run times
 - Example: Run time 5 minutes, 3 start times = 15 minutes of watering on that zone
 - Waters 5 minutes at 6 am, 5 minutes at 7 am, 5 minutes at 8 am, etc

$$S=S$$

Utilizing start times to create “deep watering”

- First start time breaks the hydrophobic barrier-tip of the spear
- Second start time utilizes the pathways created by the first start time to push water deeper
- Third start time pushes first two deeper into the soil
- Don't spread out your start times too far apart

Soil Infiltration



Typical NTX soil

Common in
amended bed soils

less common in
NTX

Factors to consider:

- Pressure
 - Increased pressure increases flow exponentially
- Soil health
 - Compacted soil will absorb more slowly
- Design efficiency
 - You have to water to your dry spots
- Deflection!
 - Water is not a ninja

Drip Irrigation

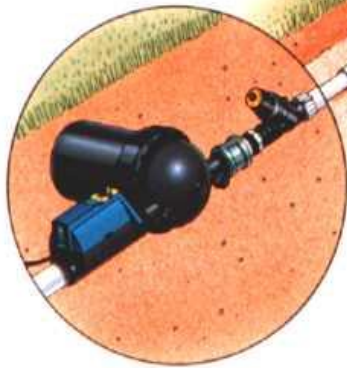
Give it a chance...

Drip is a GREAT FIT on...

- Areas where windows are getting wet
- Surrounded by sidewalk
- Where landscape has outgrown spray height
- New beds
- To balance different plant needs in same zone
 - Middle of the road solution, esp during planting transition

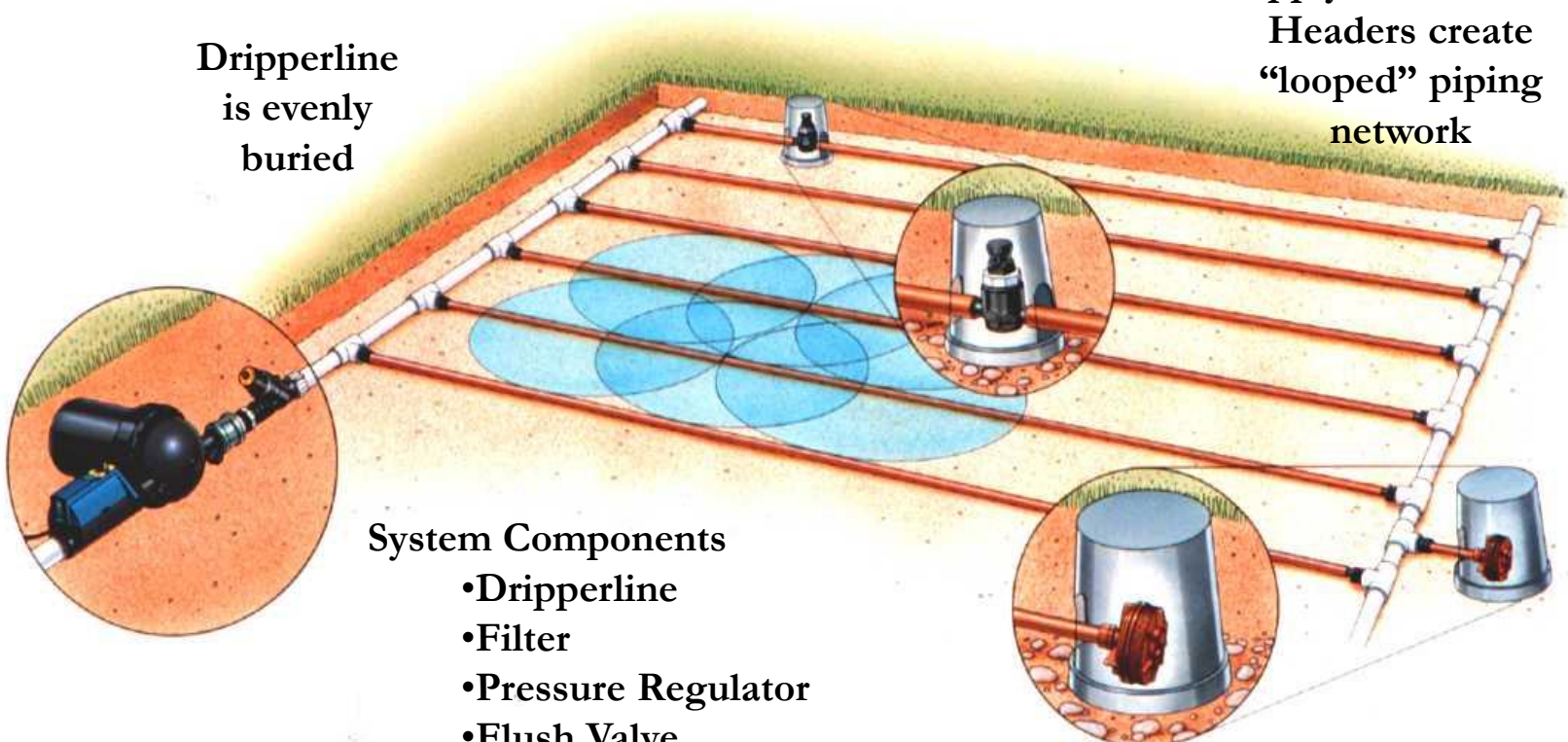
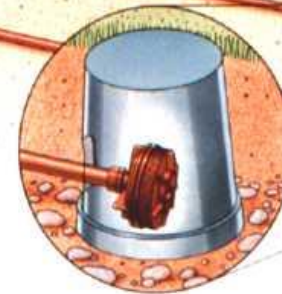
**Dripperline
is evenly
buried**

**Supply and Exhaust
Headers create
“looped” piping
network**



System Components

- Dripperline
- Filter
- Pressure Regulator
- Flush Valve
- Vacuum Relief Valve



Maintenance is Management

- Seasonal Adjustment of irrigation schedules
 - Monthly is best, 4 times a year is doable
- Periodic irrigation inspections
 - You know your system best
- Productive irrigation schedules
 - Utilize controller features
- Remote control if you can

Maintenance is Conservative

- All irrigation requires maintenance
- Facilitating water management all year through can decrease overall sprinkler spending, and save on water bills while improving plant performance
- Drip requires different maintenance, but the return can be worth it

Conservation is Conservative

- People love to save money
- People love to feel green
- It is not radical to save water
- It is necessary to conserve our water resources

The altar call

- Don't be ashamed of the grow in period
 - A properly managed grow in sets your plants up for success
 - Can eliminate need for future irrigation except in drought
 - 3 years is magic
 - Even if you have to water regularly—it is still Water Wise if you are managing it properly

All this too much? Call in Back up

- Are you an OLD DOG?
- Got too much to do to adopt conservation?
- Willing but not confident?

The altar call

- It is your privilege to be a part of the solution
 - One Water
 - Adopt it into your conversations and see what happens
 - Only you are sick of your lines
 - Measure your results and see what happens

Bottom Line:

- Any system can be WaterWise
 - Through technology
 - Hydrozoning
 - Pressure regulation
 - Controller features
 - Through methodology
 - Smart scheduling
 - Proactive service

Questions?

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