

**IRRIGATION**

**MAINTENANCE**  
**made easy**

a pocket irrigation guide to help you unearth your yard's potential

by Jill Brown, ASLA

Irrigation Maintenance Made Easy, a pocket irrigation guide to help you  
unearth your yard's potential. by Jill Brown  
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[www.mylandscapecoach.com](http://www.mylandscapecoach.com)

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For information about special discounts available for bulk purchases, sales promotions, fund-raising and education needs, contact [jill@landscapecoach.com](mailto:jill@landscapecoach.com) First Printing 2021.



## WHAT'S IN THIS BOOK?

This guide is a basic irrigation pocket cheat book to help you figure out all the pieces and parts you'll need to set up your new system or just maintain your existing system. Irrigation is by far the number one way to grow successful plants in the Southwest. (The second is shredded wood chip mulch and the third is right plant right place.)

The book takes you through the top three methods to water your plants:

1. Drip Irrigation
2. Spray Irrigation
3. Hose Watering

It also has information about Basic Irrigation maintenance complete with a checklist and resources. An irrigation book wouldn't be complete without a watering section that explains, how deep, how long, how much and how often to water your plants. The book gives you just enough information to make you knowledgeable but not enough to make you cross-eyed.

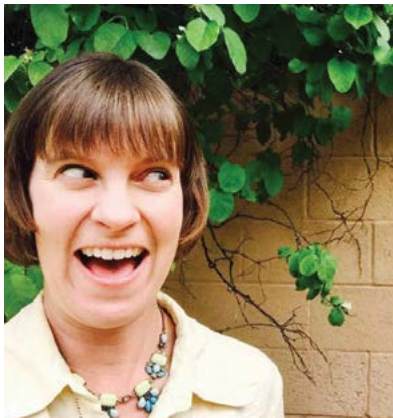
## HOW TO USE THIS BOOK?

Treat this book as a pocket irrigation guide. Browse it while you walk the yard trying to figure out what's what and use it as your safety net when you visit the irrigation supply store. Make it your own by jotting down comments, affixing it with post it notes, or dog earring your go to pages. Overall, I want you to enjoy it and let it help you feel confident about unearthing your yard's potential.

## SOME THOUGHTS ABOUT IRRIGATION:

- An automatic irrigation system is a game changer in your landscape when it comes to saving you time, money and water.
- Water Pressure is key, in most cases you'll have too much pressure so pressure regulators will be your friend. In rare cases you'll have not enough. Luckily drip systems don't need much pressure to operate.
- Once you know how long it takes to water your plants to the correct depth (see the watering chart in the back of this book) you are set. You can set it and forget it.
- It's not as expensive as you think. The most expensive items will be the irrigation valve and that runs \$600–\$1,000 parts and labor. Once you have the valves set up adding drip line is easy to DIY or inexpensive to hire it out.
- Spray can be more complicated, to design and install. A turf grass lawn is one of the most difficult plants to grow in NM. (Americans tend to obsess over their grass and keeping it in tip top shape is a challenge in the Southwest.) If you must have grass go with lower water ones such as Bermuda (watch for the spreading nature of it), or the native Buffalo / Blue grama duo. Using efficient irrigation spray nozzles can save you up to 30% in water.
- Irrigation supplies should be purchased from a local irrigation supply store. Only use the big box stores for hose attachments.
- A My Landscape Coach Fanny pack will keep all your irrigation tools in one easy to reach place! Visit [mylandscapecoach.com](http://mylandscapecoach.com) to purchase yours today.

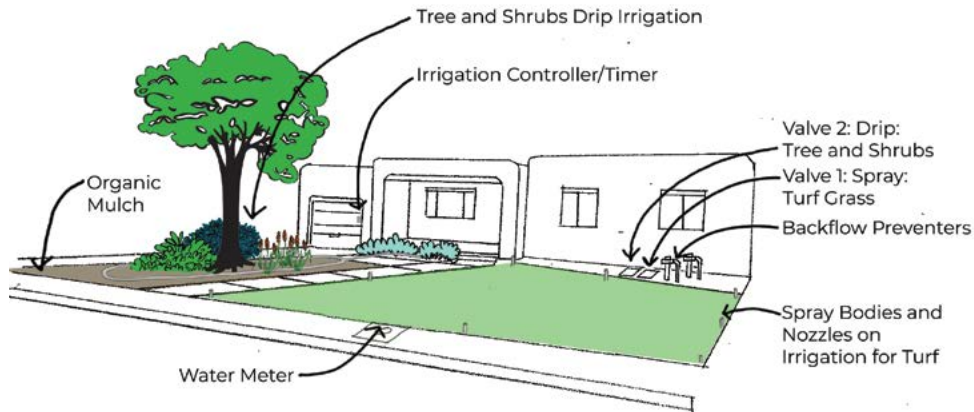
## ABOUT THE AUTHOR:



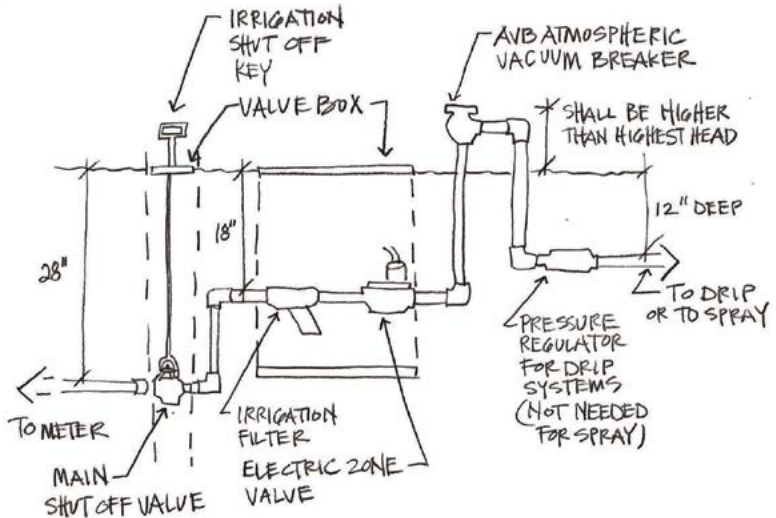
Jill is a Landscape Architect in Albuquerque, where she blogs at [mylandscapecoach.com](http://mylandscapecoach.com), created in 2013 to provide landscape design tips for the community.

As well as coaching homeowners how to unearth their yard's potential, she's the creator of Landscape Design Made Easy, an online landscape design course and workbook. Shop her other products and offerings at [landscapecoach.com](http://landscapecoach.com).

# A RESIDENTIAL IRRIGATION SYSTEM:



# TYPICAL COMPONENTS OF AN IRRIGATION SYSTEM:



**DRIP**

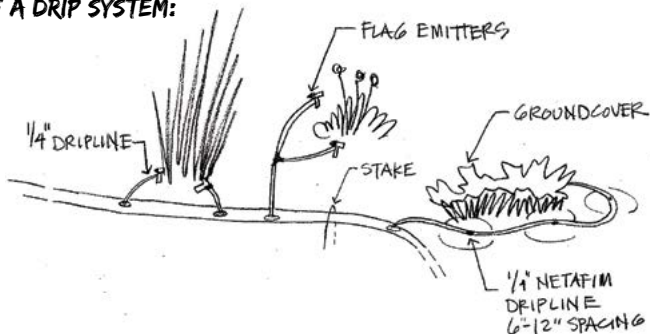


# DRIP IS IDEAL FOR ALL PLANTS EXCEPT GRASS LAWNS

Group drip valves according to plant water needs such as the examples below:

- Valve 1 for trees (inline dripline should be used to water existing/mature trees. New trees could also use inline drip or multiple, at least 5, flag drip emitters located equally spaced around the tree well. These should be moved out toward the dripline as the tree gets bigger.)
- Valve 2 for Desert friendly plants, medium or low water plants that grow well in your climate. (Install 2 Flag emitters, either 1, 2, or 4gph, per plant depending on plants water needs. Use inline dripline for groupings of plants such as annual beds, perennial beds or spreading groundcovers.)
- Valve 3 for edible gardening such as raised vegetable beds or fruit trees. These types of gardens need to be watered much more frequently than your other plants.

## BASIC LAYOUT OF A DRIP SYSTEM:



## DRIPLINES:



$\frac{3}{4}$ " POLYLINE  
(DISTRIBUTION  
LINE)



$\frac{1}{4}$ " DRIPLINE



$\frac{1}{4}$ " NETAFIM

← INLINE EMITTER

## DRIP CONNECTIONS:



## DRIP CONNECTORS:



1/4" BARBED  
COUPLING



1/4" BARBED  
TEE



DUAL  
GOOF  
PLUGS

## FLAG EMITTERS SIZES:



1 GPH  
EMITTER



2 GPH  
EMITTER



4 GPH  
EMITTER

DRIP HOLE PUNCH TOOL:



DRIP PUNCH  
TOOL

## GOOF PLUGS AND HOW THEY ARE USED:



GOOF  
PLUG  
ON  $\frac{3}{4}$ "  
CLOSES  
UP THE  
PUNCH

USED TO  
PLUG  
UNWORN  
HOLES



USED TO  
PLUG  
WORN (LARGER)  
HOLES

## GOOF PLUG FIELD EXAMPLE:



GOOF  
PLUG  
OH 1/4"



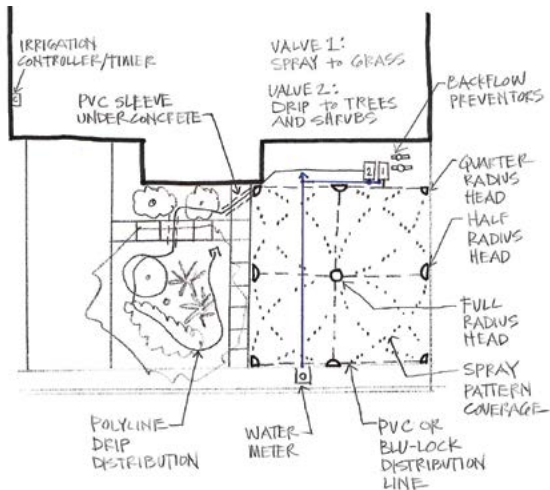
SPRAY

# WHEN TO USE SPRAY?

Spray is ideal for all grass areas such as high water use Park Blend, Bluegrass, Fescue; low water turf grass like Bermuda (prolific spreader); low water native grass lawns such as blue grama and buffalo grass; or low water native grass meadows (a mixture of native grass and wildflowers.)

Spray irrigation requires high water pressure in order to pop up the spray heads. Large areas of grass will require multiple valves for each spray zone. Spray zones are usually separated out by type of nozzle. Quarter circle (90degree) nozzle, full circle nozzles (360 degree) are on one valve, half circle nozzles (180 degree) are on a third valve. Valve quantity will depend on water pressure and the quantity of nozzles needed for the grass lawn.

## BASIC LAYOUT OF A SPRAY SYSTEM:



## THREE BASIC SPRAY IRRIGATION TYPES:



**Spray nozzles:** Traditional nozzles seen around town that put out a mist of water. These are not very efficient as the small droplets get lost to evaporation. They are good for small grass lawns but an even better solution is to replace the spray nozzle with a high efficiency rotary nozzles.



**High efficiency rotary nozzles:** Extremely efficient spray nozzles that can save up to 30% of wasted water, and is perfect for residential settings. It puts out throws from 10'-20' distances. (Hunter MP rotators are a good brand, there are benefits to each brand, Rainbird or Hunter. Do not mix brands.)



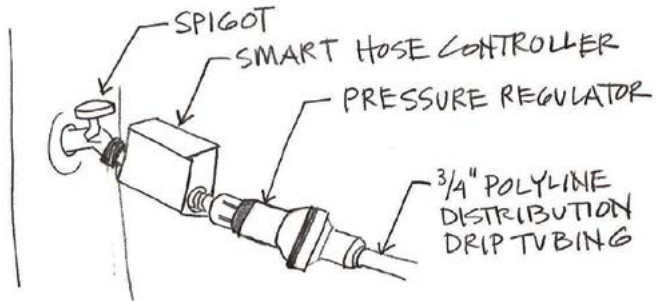
**Rotar nozzle:** Puts out a large throw and is best used at parks, sports fields and grass lawns that need throw distances of 30'-40'.

**HOSE**

# HOSE SPIGOT SETUP

Hose watering is not an efficient or ideal way to irrigate landscapes in the Southwest but they are an inexpensive way (\$100–400) to get started with a watering system before jumping into a full automated system with automated irrigation valves. The polyline and dripline parts of the hose watering system can easily be re-used when you are ready to add in ground irrigation valves.

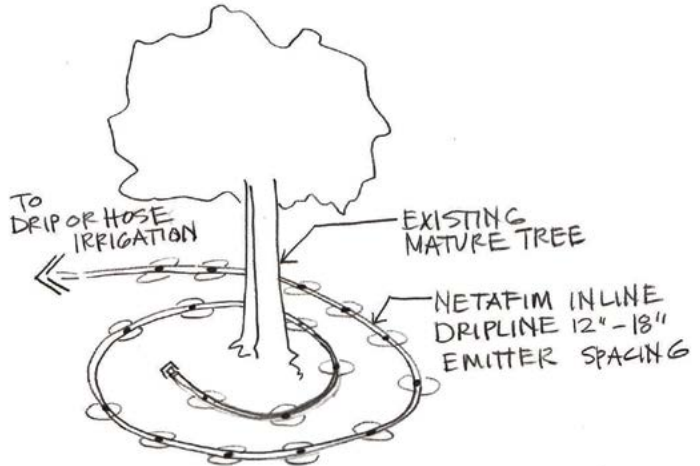
## RECOMMENDED LAYOUT OF A HOSE SYSTEM:



# TREE WATERING SYSTEM:

This is the recommended watering system you should use if you have mature and established trees that need to get watered. Trees in the Southwest need to be watered at least 1x a month including over the winter. During the heat of the summer the watering needs go up to 3-4x a month.

## BASIC LAYOUT OF A TREE WATERING SYSTEM:

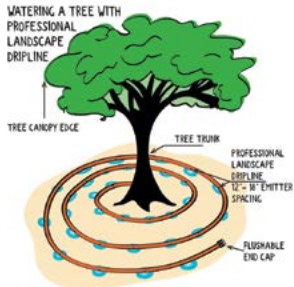


# GET YOUR OWN TREE WATERING KIT AT

[MYLANDSCAPECOACH.COM/SHOP](http://MYLANDSCAPECOACH.COM/SHOP)

## Tree watering system:

- attaches to spigot or hose
- 25' long with drip emitters every 12" to wrap around tree.
- 25 drip emitters, 1gph per emitter



By:



**MAINTENANCE**



# IRRIGATION MAINTENANCE CHECKLIST:

*Courtesy of 5050outside.com and the Albuquerque Bernalillo County Water Utility Authority.*

## **MONTHLY**

- Check for leaks by inspecting water lines, sprinklers, emitters, and other components. Look for wet spots in the landscape and listen for hissing to help locate issues.
- Your irrigation system is only as good as its aim. Adjust sprinklers and emitters to make sure they're delivering water to the landscape and not onto rocks, bare earth, or pavement.
- Replace damaged parts immediately with identical or equivalent parts. This ensures uniform coverage and optimal system efficiency.
- Locate and clean any clogged equipment.
- Use water meter and historical data to help reveal hidden leaks.
- Check to make sure irrigation controller is set appropriately for the season

## **SPRING**

- As the watering season gets underway, check your irrigation system for leaks and clogged, broken, or missing sprinkler heads and emitters.
- An outdated irrigation system can waste time, water, and money. Consider installing a new Water Sense labeled, "smart" irrigation controller to take the guesswork out of scheduling (rebates available).
- Set the controller for watering frequency, start times, and duration per zone per program.
- Replace the back-up battery in the controller.
- Test the manual shut-off or isolation valve.
- Check the water pressure in each irrigation zone.
- Check and clean filters, wherever they are in the system.

- Check and clean the filter screen in each sprinkler body. Adjust the rotor arc or spray pattern to eliminate water waste.
- Test heads to make sure they are delivering consistently and efficiently.
- Inspect all drip emitters (look for wet zones after running a complete cycle). Unclog or replace any that are malfunctioning.

## **EARLY SUMMER**

- Adjust controller for the appropriate seasonal setting.
- Adjust sprinklers and emitters to make sure they're delivering water to the landscape and not onto rocks, bare earth, or pavement.
- Check and clean filters, wherever they are in the system.
- Inspect all drip emitters (look for wet zones after running a complete cycle). Unclog or replace any that are malfunctioning.
- As plants grow bigger, move the emitters to the edge of each plant's root ball or drip line to encourage further root development.

## **FALL**

- Adjust controller for the appropriate seasonal setting.
- Test the manual shut-off or isolation valve.
- Check and clean filters, wherever they are in the system.
- Inspect all drip emitters (look for wet zones after running a complete cycle). Unclog or replace any that are malfunctioning.

## **WINTER**

- Guard your irrigation system against freezing temperatures by draining pipes and tubing and properly winterizing your system.
- When temperatures are below 40 degrees Fahrenheit, discontinue automatic watering and turn on systems manually or hand water as needed.

# IRRIGATION QUICK FIXES:

Call a professional when...

- Leak at the meter or in the main waterline going from the meter to the house. (call the Water Authority)
- Leak in the lines when you turn on the irrigation system. Call a professional if you don't want to dig it all up.
- Leak at the valves. Call a professional.
- Leak at the irrigation spray head. DIY first then call professional
- Leak in the  $\frac{3}{4}$ " or  $\frac{1}{2}$ " dripline. DIY by purchasing a connector that allows you to splice two lines together. (If it's a small leak a goof plug might suffice.)
- No water coming out of the flag emitter means its clogged with dirt. Simply pop off the flag, turn on the irrigation system and flush the dirt out the line. Return flag after it's clean.
- Leak in the  $\frac{1}{4}$ " dripline. DIY by adding a connector so you can splice the lines together or simply just replace the  $\frac{1}{4}$ " with new line.

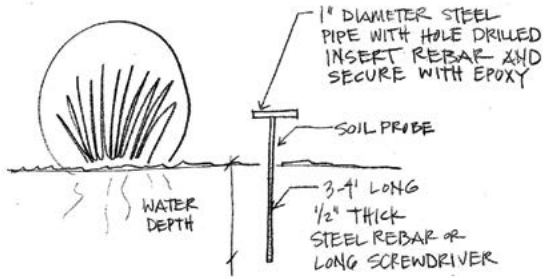
**WATERING**

# WATERING DEPTH:

Once you know how long it takes to water your plants to the correct depth you are set. You can set it and forget it.

## HOW TO FIGURE OUT THE WATERING DEPTH?




























Use a soil probe or a long screwdriver to test soil moisture. Push the screwdriver into the soil **24 hours** after you've watered your plants. It will go easily into moist soil. Mark and measure how far it went into the ground. That will tell you how deep you have watered that plant. Every yard is different, but once you figure out how long it takes your watering system to water to certain depths, you'll be set.



Plant Type		WINTER (DEC TO FEB)	SPRING (MAR TO MAY)	How Deep?
	TREES	1 TIME PER MONTH	1-2 TIMES PER MONTH	24" INCHES
	SHRUBS	1 TIME PER MONTH	2-3 TIMES PER MONTH	24" INCHES
	FLOWERING PLANTS	1 TIME PER MONTH	1 TIME PER WEEK	12" INCHES
	DESERT ACCENTS	NONE	1 TIME PER MONTH	24" INCHES
	GROUNDCOVER	1 TIME PER MONTH	3 TIMES PER MONTH	12" INCHES
	GRASS: TURF (COOL SEASON)	2 TIMES PER MONTH	1-2 TIMES PER WEEK	4" INCHES
	GRASS: TURF (WARM SEASON)	1 TIME PER MONTH	1-2 TIMES PER WEEK	6" INCHES
	GRASS: ORNAMENTAL	1 TIME PER MONTH	1 TIME PER WEEK	12" INCHES
	VINES	1 TIME PER MONTH	1-2 TIMES PER MONTH	18" INCHES

🌧️=MONTHLY

💧=WEEKLY

Plant Type	SUMMER (JUN TO AUG)	FALL (SEP TO NOV)	How Deep?
 TREES	 1 TIME PER WEEK	 2-4 TIMES PER MONTH	24" INCHES
 SHRUBS	 1 TIME PER WEEK	 1 TIME PER WEEK	24" INCHES
 FLOWERING PLANTS	 2 TIMES PER WEEK	 1 TIME PER WEEK	12" INCHES
 DESERT ACCENTS	 2 TIMES PER MONTH	 1 TIME PER MONTH	24" INCHES
 GROUNDCOVER	 1 TIME PER WEEK	 2 TIMES PER MONTH	12" INCHES
 GRASS: TURF (COOL SEASON)	 3-5 TIMES PER WEEK	 2 TIMES PER WEEK	4" INCHES
 GRASS: TURF (WARM SEASON)	 2-3 TIMES PER WEEK	 1 TIME PER WEEK	6" INCHES
 GRASS: ORNAMENTAL	 1-2 TIMES PER WEEK	 2 TIMES PER MONTH	12" INCHES
 VINES	 1 TIME PER WEEK	 2 TIMES PER MONTH	18" INCHES

=MONTHLY =WEEKLY

Water by the seasons watering chart courtesy of 505Outside.com and the Albuquerque BernalilloCounty Water Utility Authority.

I hope you enjoyed this irrigation maintenance guide as much as I enjoyed writing it for you.

For more great content where this came from visit [mylandscapecoach.com](http://mylandscapecoach.com) where you can check out our blog, sign up for our monthly newsletter plus shop all our products and services. As always you can join us daily over on:

Instagram: [@mylandscapecoach](https://www.instagram.com/mylandscapecoach)

Twitter: [@jillguarinobrow](https://twitter.com/jillguarinobrow)

Facebook: [@MyLandscapeCoach](https://www.facebook.com/MyLandscapeCoach)

I look forward to seeing you and your yard!  
You are well on your way to unearthing your yard's potential.



# REFERENCES

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[hunterindustries.com](http://hunterindustries.com)

[rainbird.com](http://rainbird.com)

# GLOSSARY

Late winter - February 1st

Deep or deeply water - Water groundcovers, accent plants, and grasses to a depth of 1 foot. Water shrubs to a depth of 2 feet. Water trees to a depth of 3 feet. Deep watering promotes deep rooting which will help plants evade drought.

1x - one time, 2x - two times, etc.

Under plant, understory - planting vegetation underneath a tree or large shrub.

# THANK YOU!

I hope you enjoyed this irrigation book as much as I loved writing it for you. I'd love to hear what you think about it. Please leave a comment at [mylandscapecoach.com/book](http://mylandscapecoach.com/book) or if you'd rather reach me in private shoot me an email at [jill@landscapecoach.com](mailto:jill@landscapecoach.com). I read each and every one.

Lastly, if you haven't already, you can follow me on Instagram @mylandscapecoach, Twitter @jillguarinobrow, and join in on the conversations going on right now on my Facebook page @MyLandscapeCoach. Visit my website for all the links, [www.mylandscapecoach.com](http://www.mylandscapecoach.com).

YOUR LANDSCAPE COACH,

A handwritten signature in black ink that reads "Jill". The signature is written in a cursive, flowing style with a large, sweeping initial "J".



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yard's potential

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