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WEBINAR HOUSEKEEPING

Please keep microphones muted. 

Submit questions via chat to host. 

Questions will be answered at the end of the presentation.

This presentation will be emailed at the conclusion for future reference.



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AGENDA

Fall into Winter is the best time to care for your landscape

- Watering to the season
- Landscape cultural practices
- Pruning for plant health
- Climate appropriate plants
- Inspect your sprinkler system



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Create a Beautiful Landscape

LANDSCAPE WATER NEEDS

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REDUCE YOUR LANDSCAPES WATER NEEDS

Consider reducing or eliminating unused areas of lawn

Convert to climate appropriate plants

- CA native & non-native climate appropriate plants

More decorative permeable hardscapes

Storm water capture

Easy to maintain



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LANDSCAPING WITH GRASS

The highest water-use plant:

- Every 1,000 square feet requires 25,000 to 35,000 gallons per year
- 4,000 +/- gallons: monthly summer demand



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CLIMATE APPROPRIATE LANDSCAPES SAVE WATER

- 30%-50% water savings
- 15,000-20,000 gallons per year for every 1,000 square feet
- 2,500 +/- gallons: monthly summer demand



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LANDSCAPING WITH LOW WATER USE PLANTS

- 60%-80% water savings
- 4,000-12,000 gallons per year for every 1,000 square feet
- 1,500 +/- gallons: monthly summer demand



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CALIFORNIA NATIVES: THE RIGHTSCAPE

- 80%+ water savings
- Build habitat for pollinators
- Fully or partially summer dormant
- Require little to NO supplemental water once established.



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Seasonal Water Needs

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SEASONAL WATERING SCHEDULES

Three main questions when watering your landscape

- How long should I water for?
- How often should I water?
- What time do I start watering?



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BENEFITS OF PROPER WATERING

The landscape will look better with efficient water use

- Stay within budget
- Conserve water
- Healthier plants
- Healthier soil



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WATERING FACTORS



WEATHER

The state of the atmosphere with respect to wind, temperature, cloudiness, moisture, pressure, etc.



PLANTS

Water Use Classification of Landscape Species: Plants evaluated as needing high, moderate, low, and very low amounts of water.



IRRIGATION

Irrigation is the application of controlled amounts of water to plants at needed intervals.



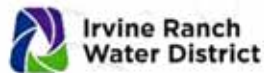
SOILS

Medium in which plants grow, a black or dark brown material typically consisting of a mixture of organic remains, clay, and rock particles.

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NOW'S THE TIME TO WATER 30% LESS

**September is the time
to water 30% less.**



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Weather, Plant & Water Relationships

MEDITERRANEAN CLIMATE


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PLANT WATER NEED


Plants water requirements differ
A plant's water need can be measured using its Kc value (plant factor)
WUCOLS plant factors

Category	Abbreviation	Percentage Of ETo	Plant Factor
High	H	70-90	Kc = 0.7 - 0.9
Moderate	M	40-60	Kc = 0.4 - 0.6
Low	L	10-30	Kc = 0.1 - 0.3
Very Low	VL	< 10	Kc = < 0.1


High ET




Mod ET





Low ET



Very Low ET



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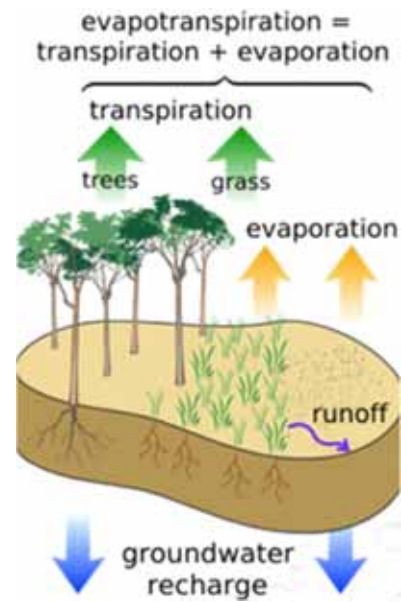
PLANT WATER LOSS

ET_o Evapotranspiration – Measurement of the amount of water that is lost

- Through the soil and plants
- On top of the soil and plants
- ET or water loss is measured in inches

Compare to water added

- Rain is measured in inches
- Irrigation is measured in inches



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IRWD WEATHER STATIONS DAILY ET_o

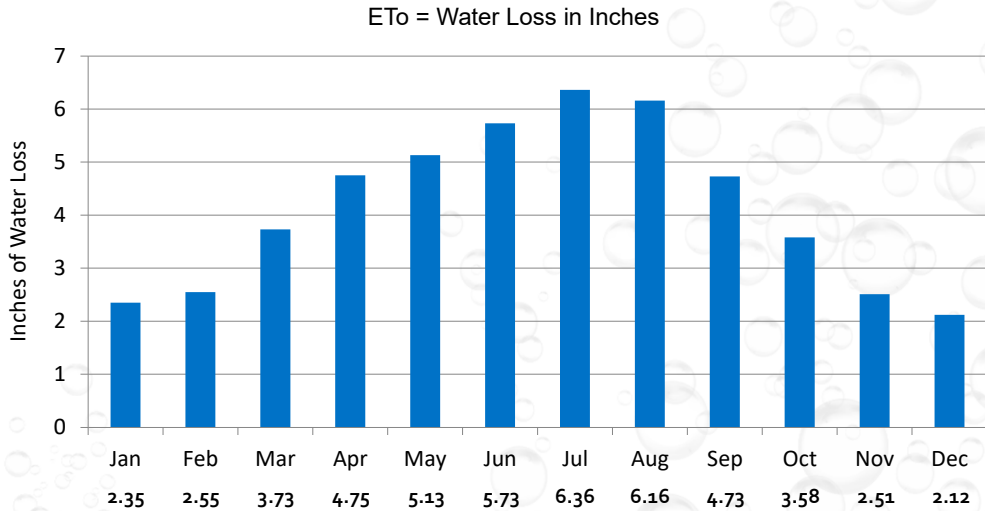
Measures Daily ET based on the following factors:

- Measured in Inches
- Cool season grass
- Solar Radiation
- Temperature
- Wind
- Humidity



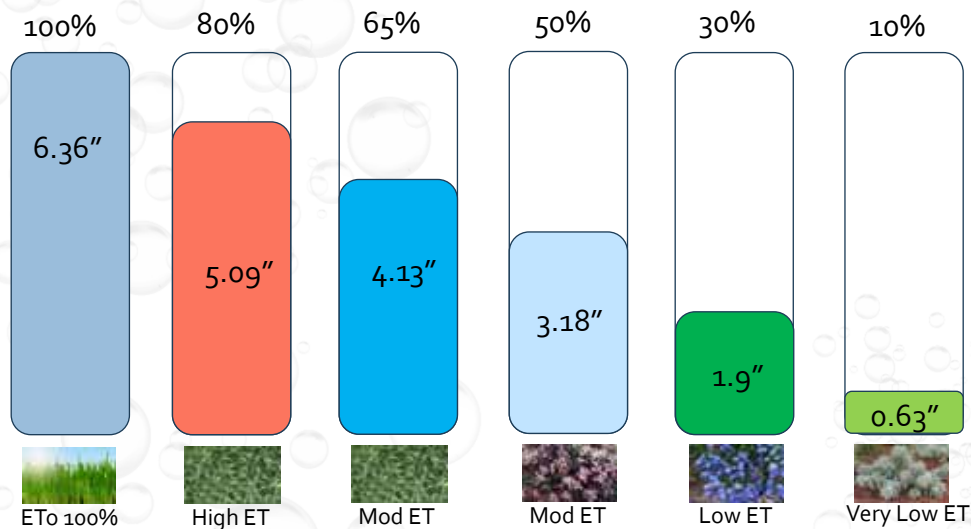
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WEATHER STATION & ET_o – CENTRAL ZONE



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PLANT WATER NEED BASED ON JULY ET_o



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Water To The Bell Curve

MEDITERRANEAN CLIMATE

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SEASONAL WATER NEEDS: CLIMATE APPROPRIATE PLANTS

Water to the season

When do I start watering?

- Wait until summer to start watering?
- Spring showers...

Watering can begin as soon as Spring

We are in the peak of watering in the Summer

Start reducing your watering in the Fall by 30%

Turn off your sprinklers in winter






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CA NATIVE PLANTS SEASONAL NEEDS

For many of our CA native plants,
water need is opposite

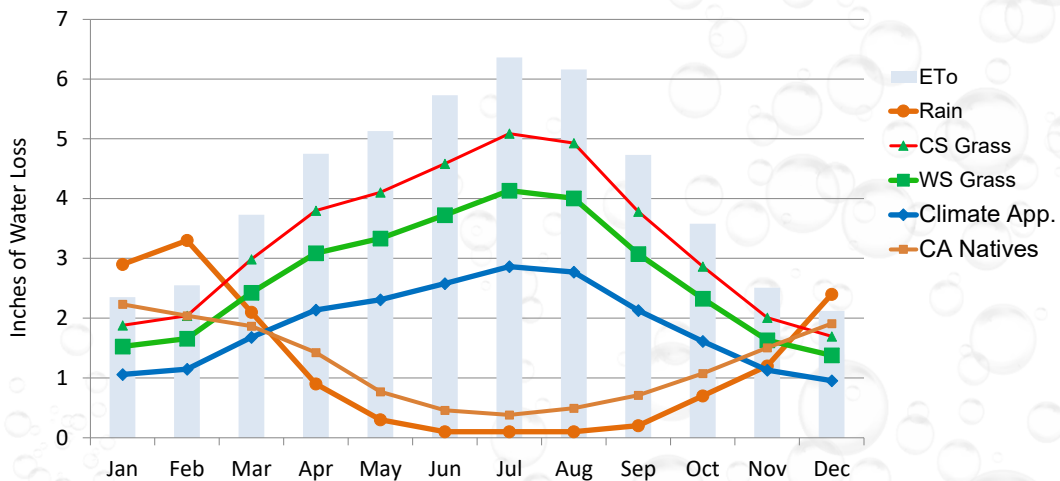
- They awaken from their summer slumber
- Water needs begin in late Fall through Spring
- Deep infrequent watering



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PLANTS SEASONAL WATER REQUIREMENTS

CA Native Plants vs. Exotic Climate Appropriate Plants



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HYDROZONING

Hydrozoning Principles

Grouping plants together that have similar cultural needs

- Plant types
- Water requirement
- Sun exposure
- Soil requirements
- Growth Rate



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Landscape Cultural Practices

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BUILD UP OUR SOILS

Too much clay, too sandy, too stony or too acidic???

Turn a poor soil into a plant friendly soil

- First, understand the components of a healthy soil
 - Weathered rock
 - Organic matter
 - Water
 - Air



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SOIL LIFE

Soils hidden "magic" are.... Organisms!!!

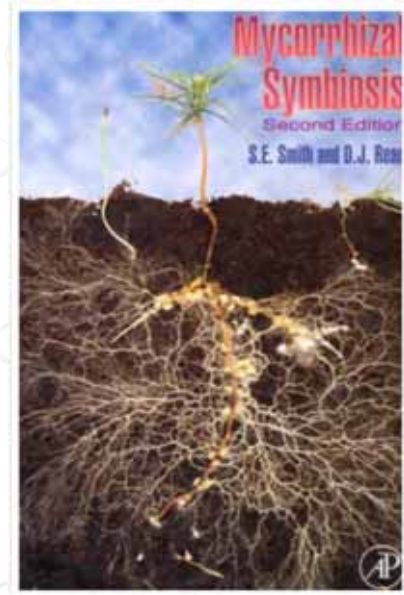
- Small animals, worms, insects and microbes

Flourish when other soil elements are in balance

Bacteria are vital for recycling nutrients

Fungi help to hold and transfer nutrients directly to plants through symbiotic relationships

Both need to be well balanced since they are the DECOMPOSERS



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SOIL LIFE

Soils Predators prey upon the bacteria, fungi, etc.

Release soluble or plant-available nutrients

Soil arthropods, soil shredders, small and large, foster a complete food chain within, and beyond the soil

Nematodes hold and recycle the nutrients present in the organisms that they feed upon

Protozoa digest bacteria and release excess nitrogen in plant available forms around roots



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OVERALL ADVANTAGE OF SOIL LIFE

They assist in the decomposition of organic matter

- Makes nutrients available for the plants

Controls the population of soil pathogens

They improve or enhance soil structure

- Circulation of water and air
- Helps decrease soil compaction
- Healthier environment for roots



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ENCOURAGE SOIL LIFE

Let plant litter or debris lay where it falls

- Great source of organic matter and mulch
- It is a food source for critters

Water appropriately and effectively

- Provide adequate oxygen and moisture

Try not to till or disturb you soil to much

- Remember the beneficial fungi filaments



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SOIL CONDITIONERS

What is the best soil amendment?

- For sandy soils..
- For clay soils...

COMPOST!!!



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COMPOSTING

Best supplement you can give your garden soil
 Add nutrient-rich humus which fuels plant growth
 Restores vitality to depleted soil

It's also free!!!

Easy to make
 Good for the environment

Mix:

Nitrogen & Carbon or
 Greens & Browns
 In Layers
 Keep Moist
 Air circulation
 Heat, heat, heat



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PLANTS & SOIL

MULCH, MULCH, MULCH!!!

All plants and soil will benefit

- Retain soil moisture
- Reduce soil temperature
- Erosion control
- Helps control weeds
- Beneficial insects and earthworms will thrive
- It will break down and become part of your soil



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WEEDING YOUR PLANTER BEDS

Weeds are vector points for unwanted pests
Weeds can pass diseases along



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WEEDING YOUR PLANTER BEDS

Once cleaned of weeds, lay newspaper down
• 4-5 sheets thick



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WEEDING YOUR PLANTER BEDS

Place mulch on top..... That is it!!!



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**Pruning for
Plant Health**

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ASK YOURSELF WHY

Think about what you want to change and what do you want to achieve.

- Are there Branches that are dead or rubbing against each other?
- Are there dead flowers?
- Do you want the plant to stand out as a focal point in the garden?
- Has it become too leggy?
- Do you want to control its size?
- Does it have a disease?



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WHEN IS IT IDEAL TO PRUNE?

Should I prune in the spring, summer, fall, or winter?

When should I prune deciduous plants?

How much should I prune?

What about sheering?

Is it necessary to prune my trees? How often?

What about pruning CA native plants? Is there a difference?



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CLEAN TOOLS, HEALTHY LANDSCAPE

Make sure they are clean, sharp and free of soil and debris

See rust, use vinegar to clean

Oil your tools, linseed oil & others

Cutting tools, make sure they're sharp

Consider a dip solution for disinfecting

Sanitize your tools before and after gardening

Clean, dry, sharpen, and oil your tools after use and before storing



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WINTER PRUNING

Pruning during dormancy is the most common practice

- Promotes vigorous burst of new growth in the spring
- Deciduous plants and trees
- Late winter is best



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PRUNING FLOWERING PLANTS TO ENHANCE FLOWERING

If your purpose for pruning is to enhance flowering:

- For plants that bloom in spring, prune when their flowers fade
- Trees and shrubs that flower in mid-to late summer should be pruned in winter or early spring.



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PRUNING

Pruning should not substitute the good selection of plants

Pruning begins at planting time

Pruning encourages new growth

Prune to maintain plants

Encouraging flowering & fruit development

Desired plant or garden form



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PRUNING

Prune to promote plant health

Follow the 3 D's – Remove; dead, damaged, & disease

Remove branches that rub together

Remove big branches



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PINCHING BACK OR TIPPING

Pruning method generally used on young plants

Encourage branching

Stems or branches grow from leaf nodes



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SUMMER PRUNING

Reasons to prune in summer;

- To direct the growth by slowing the branches you don't want
- Primarily to control size
- Pruning should be done soon after seasonal growth is complete
- Reduce the total leaf surface, reducing photosynthesis
- Beneficial for fruiting trees for size



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PRUNING DO'S AND DON'TS



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PRUNING DO'S AND DON'TS



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Climate Appropriate Plants

MEDITERRANEAN CLIMATE

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THE RIGHT PLANTS FOR OUR CLIMATE

What are California Friendly® or drought tolerant plants?

What are California native plants?

Is there a difference?



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SO. CA MEDITERRANEAN CLIMATE

California is NOT a desert!



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CALIFORNIA FRIENDLY® PLANTS

Climate appropriate plants from
around the world

They are moderate water users

They need summer water

Easy to adapt



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CALIFORNIA NATIVE PLANTS

- Natives build habitat for
pollinators
- Fully or partially summer
dormant
- They require little or no
supplemental water once
established



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Inspect Your Sprinkler System

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IRRIGATION ISSUES

Visually Inspect Your System

- Maintenance is KEY!!!
- 1 – 2 times a month
- Sprinkler Issues
- Needed repairs
- Retrofit opportunities



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SPRINKLER FUN OR WASTE?



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PRESSURE IS TOO HIGH

- High pressure causes misting
- Water drifts in wind
- Damages sprinklers bodies and seals
- Higher gallons per minute (gpm)



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PRESSURE REGULATING BODIES

Special Spray Head Bodies

- Built in pressure regulation
- Built in check valves
- Better wiper seals



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SPRINKLER HEADS ARE TOO LOW

Spray blockage wastes water

- Run off issues
- Need higher pop up



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SPRINKLER HEADS ARE TOO LOW

Change to higher pop-ups
4" to 6" or higher
Might need swing joints



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MISSING NOZZLES & BROKEN BODIES

Missing nozzles or broken bodies
Issues like this can waste as much as
40+/- gallons per minute!!!



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WORN, CRACKED, OR BROKEN SPRINKLER SEALS

Overtime, seal tend to wear out

- Replace seals
- Replace caps
- Retrofit



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WORN, CRACKED, OR BROKEN SPRINKLER SEALS



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TILTED SPRINKLERS

Water not applied efficiently
Possible broken riser
Swing arm adjustment



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CLOGGED HEADS OR NOZZLES

Dry areas
Screen clogged
Clean or replace
Replace with brand type



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OVERSPRAY

Water on sidewalk/hardscape
Adjustment screw – fine tuning



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MISALIGNED OR ARC COVERAGE ISSUES

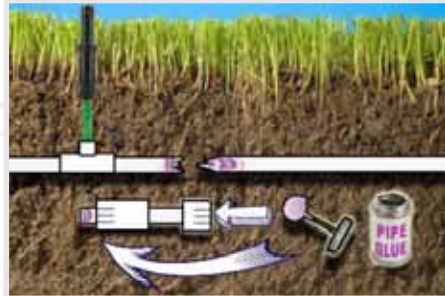
Dry areas, hot spots
Water on sidewalk/hardscape
Adjustment screw – fine tuning



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BROKEN IRRIGATION LINES

Cracked or broken lines
Use a slip fix (video)



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PLANT INTERFERENCE

Plants can interfere with the
spray of water.
Water not going to where it is
needed.
Can cause runoff.
Convert to drip?



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RUNOFF

- Caused by over-watering
- Arc misalignment
- Low head drainage
- Sloped areas
- Overspray
- Etc.
- Picks up pollutants



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RESIDENTIAL INCENTIVES

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DIY TURF REMOVAL PROGRAM

Help California save water by removing your grass.

Residential Customers

- Receive \$2 per sq.ft.
- Capped at max of 5,000 sq.ft.
- 250 sq.ft. minimum
- See FAQ below for more details



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[RightScapeNow.com/rebates/residential-rebates](https://www.rightscapenow.com/rebates/residential-rebates)



Financial incentives to help save water

Outdoor rebates

- Turf removal rebate program
- Weather-based irrigation controllers
- Rotating spray nozzles
- Rain barrels and cisterns
- Soil moisture sensors
- Drip conversion

Indoor rebates

- High-efficiency clothes washers
- High-efficiency toilets

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ONLINE RESOURCES

IRWD.COM / RIGHTSCAPENOW.COM

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SAVE WATER & MONEY: RightScapeNow.com

- Water-saving tips
- Upcoming workshops
- Rebates
- Online training
- How-to videos
- Do-it-yourself home check-up

Upcoming workshops & events



Wednesday, Oct. 14
12 p.m. to 1 p.m.
My Garden, My Watershed



Wednesday, Nov. 18
12 p.m. to 1 p.m.
Time to Plant

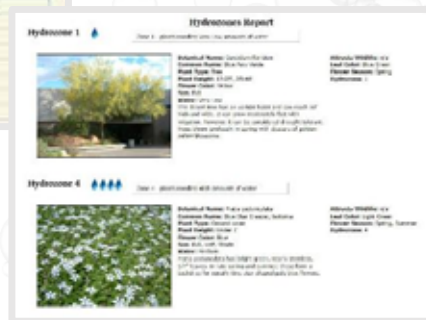



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LANDSCAPING IDEAS: RightScapeResources.com



- View gardens
- Watering calculator
- Search for plants
- Design ideas
- Printable plant lists



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QUESTIONS ABOUT YOUR LANDSCAPE?

Ask Juan!


Juan Garcia is IRWD's landscape water efficiency specialist with more than 10 years of experience in efficient irrigation practices and drought-tolerant plant selection


- Monthly "Ask Juan" column featured in IRWD's Pipelines newsletter
- Email him at: AskJuan@IRWD.com


Ask
Juan




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 Irvine Ranch Water District

 @IRWDnews

 youtube.com/IrvineRanchWD



Website: IRWD.com

Water efficiency information
RightScapeNow.com

Email: Info@IRWD.com

Phone: 949-453-5300

15600 Sand Canyon Ave., Irvine, CA 92618

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THANK YOU FOR ATTENDING!






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