

# Resource guide for water efficiency.



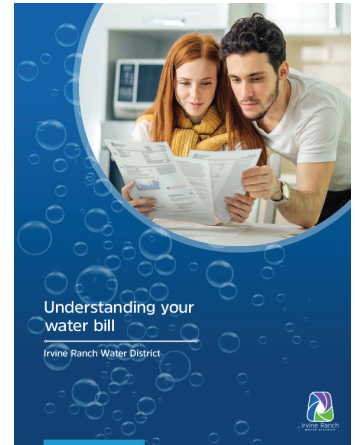


# Below the surface of your water bill.

## Basic components of your bill

On the surface, your bill is pretty simple: Use more water and the bill goes up. Use less and it goes down. That’s because IRWD uses a budget-based rate structure — which provides the water you need and gives you control to save money. But a lot goes into your water bill. Here’s a deeper look at the basic components of your bill:

- 1. Water usage charges:** Variable charges — based on the amount of water you use.
- 2. Service charges:** Fixed charges — to recover the fixed expenses of operating and maintaining IRWD’s water distribution infrastructure, pipes, treatment plants, and sewers.



View this guide to see how your water budget helps determine your water bill.

## The variable charges

To encourage wise water use, each residence is assigned a monthly water usage budget. How much you pay for each CCF of water depends on whether you stay within your budget. Rates are broken into four tiers. Each tier is assigned a rate based on the **actual cost of service**, which varies according to the water source. For example, groundwater from local wells is least expensive, while imported water from out of state or Northern California costs the most. The **low volume** and **base rate** tiers reward customers who use water within their budget, reducing the need to import expensive water.



### What's a CCF?

It's the basic water measurement used on your bill. CCF is short for 100 cubic feet. 1 CCF = 748 gallons.

Rate tier	Water budget	Rate per CCF	
<b>Tier 1: Low volume</b>	Up to 40% of your budget	<b>\$1.53</b>	Water use within monthly budget
<b>Tier 2: Base rate</b>	41% to 100% of your budget	<b>\$2.42</b>	
<b>Tier 3: Inefficient</b>	101% to 140% of your budget	<b>\$5.15</b>	Water use over monthly budget
<b>Tier 4: Wasteful</b>	141% and over of your budget	<b>\$14.64</b>	

## Where to learn more:

▶ For details, including nonresidential rates, visit [IRWD.com/services/rates-charges](http://IRWD.com/services/rates-charges)

▶ Have questions or concerns? We’re happy to help. Contact [CustomerService@IRWD.com](mailto:CustomerService@IRWD.com) or **949-453-5300**.

\*Rates effective Feb. 1, 2022



# ... your water bill (continued).

## The fixed charges

In addition to the water usage charges that you control, your bill contains fixed charges for water service and sewer service. Water service charges are based on the size of the water meter required to provide flow for the property. These charges are assessed whether or not you use water that month.

## How your water budget is calculated

Your monthly household bill is the sum of your indoor + outdoor budgets. Together they represent an efficient volume of water to meet your individual household needs.

▶ **Your indoor budget** is simple: 50 gallons per person per day (divided by 748, to convert gallons to CCF). For single-family homes, we assume a default of four people per household.

▶ **Your outdoor budget** is calculated for your property using actual data from local weather stations. The calculation is **irrigated landscape area** x **evapotranspiration** (actual daily plant water loss in cubic inches) x **0.75 plant factor** (to account for the fact that at least 40% of your landscape should be drought-tolerant) x **36.3 conversion factor** (to convert cubic inches into CCF).

### Water budgets:

#### Single-Family Residence



Base Number of Residents per Household  
**4**

Default 1,300 square feet of total landscaping

#### Attached Home or Condo



Base Number of Residents per Household  
**3**

Default 435 square feet of total landscaping

#### Apartment



Base Number of Residents per Household  
**2**

No landscaping

$$\begin{array}{l}
 \text{Indoor budget} \\
 + \\
 \text{Outdoor budget}
 \end{array}
 =
 \begin{array}{l}
 \text{House icon} \\
 = \\
 \text{People icon} \times 50 \text{ gallons per person} \times \text{Calendar icon} \div 748 \\
 \text{Conversion (748 gallons = 1 CCF)}
 \end{array}
 +
 \begin{array}{l}
 \text{Tree icon} \\
 = \\
 \text{Grass icon} \times \text{Sun icon} \times 0.75 \times 36.3 \\
 \text{Irrigated landscape area} \times \text{Evapotranspiration (monthly weather data)} \times \text{Plant factor} \times \text{Conversion factor}
 \end{array}$$

▶ Water can be added to your budget to address a larger landscape, an increase in household residents or special circumstances. Apply for a variance at [IRWD.com/services/request-a-water-variance](http://IRWD.com/services/request-a-water-variance).



# Leak detection.

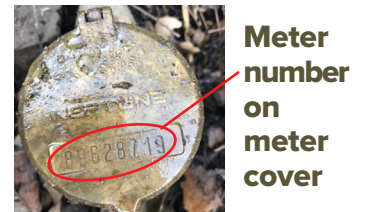
## Do you have a leak?

### Find out by using your water meter:

- Step 1** Turn off everything that uses water, both inside and outside your house, such as appliances, fixtures, irrigation, water features and water treatment devices.
- Step 2** Locate your water meter (usually near the street) and your water meter number (listed at the top of your monthly water bill).
- Step 3** Match the water meter number\* on your bill with the number etched on the hinged metal meter cover.
- Step 4** If the flow indicator, a triangle or spindled-circular shape (A) is moving, you may have a leak, or you missed turning off something that is using water.

### Refer to your water bill when reading your water meter.

**\*Find your meter number here on your bill.** Previous meter reading is on page 2 of your most recent bill, listed under "Billing Details."



### Three indicators to consider on your water meter dial:

- A Flow indicator:** If this dial keeps spinning after you have shut off all water outlets, both indoor and outdoor, then you probably have a leak.
- B Sweep hand:** As the water passes through the water meter the sweep hand moves in a circle. One full rotation will change the counter number in the black section.
- C Counter:** The numbers here record your water consumption. You're billed based on what the meter reads here. (This one reads 974 CCF.)



# Stay smart about your water use.

Go to our website to explore and track your water usage and see how you are doing compared to similar homes. It's FREE and only takes a minute to get started. This service is part of our commitment to provide you with the best tools to manage your water use and your bill.

Sign up at:  
[IRWD.waterinsight.com](http://IRWD.waterinsight.com)



### Take part

Join the thousands of households and businesses using this program to stay smart about their water use.



### Ensure an accurate analysis

Use the website to update the number of occupants in your home.



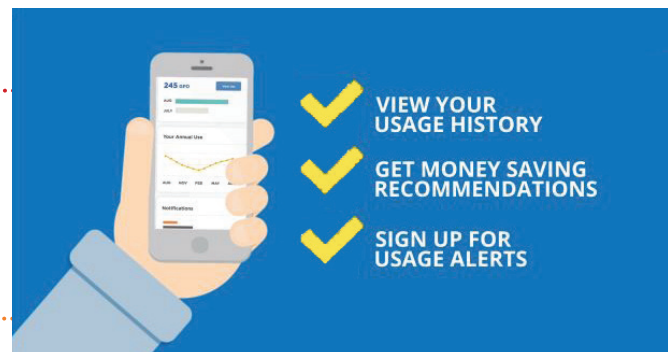
### Break down your use

See where and when you are using the most water.



### Become a Water Saver!

Focus on actions with the biggest impact and track your progress over time.



# Rebates to help you use water wisely outdoors.

**Irrigation controller:** The primary function of an irrigation controller is to send a signal to open the sprinkler control valves, sending water through the underground water lines and to the sprinkler heads.

Irrigation controller should be set with an accurate time and date, and programmed to water appropriately for the season. See pages 6-9 for seasonal irrigation schedules in English and Spanish. To obtain IRWD rebates toward the purchase of irrigation controllers, visit [rightscape.com/rebates](https://rightscape.com/rebates).



Irrigation controller

**Water pressure control:** To maintain optimum sprinkler system pressure of 30-50 pounds per square inch, you can install a pressure regulator at the sprinkler valve above ground or install inline valves below ground. You can also use pressure-regulating spray bodies to control the water pressure of individual spray heads, which will also result in water savings. To find out how to obtain IRWD rebates toward the purchase of pressure-regulating spray bodies, visit [rightscape.com/prs-program](https://rightscape.com/prs-program).



Pressure-regulating  
spray bodies

## More rebates and handy links.

### Outdoor rebates

About 60% of an average home's water consumption goes toward the landscape. Save on your home's outdoor water use with one or more of these additional rebates or rebate programs:

- Turf Removal Rebate Program
- Drip irrigation conversions
- Rotating spray nozzles
- Soil moisture sensors
- Smart hose bib irrigation controllers
- Rain barrels
- Rain cisterns

### Indoor rebates

- High-efficiency clothes washers

- High-efficiency toilets

Visit [rightscape.com/rebates](https://rightscape.com/rebates) for all residential rebate details.

### More water-saving information:

Find out about IRWD's free webinars, landscape resources and programs at [rightscape.com](https://rightscape.com).

Go to [wateringguide.com](https://wateringguide.com) to view online versions of the printable seasonal watering schedules provided on pages 6-9.

Participation in rebate programs may be discoverable under the California Public Records Act.



# Irrigation scheduling.

The following chart suggests a weekly schedule for spray head irrigation, assuming heavy clay soils common to most local coastal and foothill areas. Generally, these are the maximum times you will need for full sun areas.

Start with this schedule and increase the times only if your plants show signs of stress. If stress occurs in isolated areas, check your irrigation system for leaks or coverage gaps before increasing watering times.

## Spray head irrigation schedule

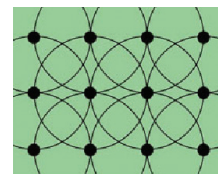
For standard sprayhead irrigation systems



Month	Turfgrass	Drought tolerant trees, shrubs & groundcover	% Option**
January	2 days, 2 cycles of 2 minutes	1 day, 2 cycles of 3 minutes	30%
February	2 days, 2 cycles of 2 minutes	1 day, 2 cycles of 3 minutes	30%
March	3 days, 2 cycles of 3 minutes	2 days, 2 cycles of 3 minutes	50%
April	3 days, 2 cycles of 4 minutes	2 days, 2 cycles of 4 minutes	70%
May	3 days, 3 cycles of 3 minutes	2 days, 3 cycles of 3 minutes	80%
June	3 days, 2 cycles of 5 minutes	2 days, 3 cycles of 3 minutes	90%
July	4 days, 3 cycles of 3 minutes	2 days, 3 cycles of 4 minutes	100%
August	4 days, 3 cycles of 3 minutes	2 days, 3 cycles of 4 minutes	100%
September*	4 days, 2 cycles of 3 minutes	2 days, 2 cycles of 4 minutes	70%
October*	3 days, 2 cycles of 3 minutes	2 days, 2 cycles of 3 minutes	50%
November*	2 days, 2 cycles of 3 minutes	1 day, 2 cycles of 4 minutes	40%
December	2 days, 2 cycles of 2 minutes	1 day, 2 cycles of 3 minutes	30%

\* In September, plants' water needs drop by approximately 30% even if the temperature is hotter, because the days are shorter, so evaporation decreases. Also plants are entering a dormant phase where they need less water. In some years, humidity is also higher, decreasing plants' water needs as it slows the rate of evaporation. This rapid drop in water needs will continue in October and November.

\*\* The % option, set with either a button or a dial, permits the watering run times for all irrigation system valves managed by an electronic controller to be increased or decreased with just one adjustment by percentage.



For even coverage, spray heads should be spaced evenly apart, the same distance as the range of the spray.



# Programación de riego.

En la siguiente tabla se sugiere un horario de riego semanal para los controladores de riego automáticos. En esta tabla se asume que su sistema tiene aspersores de rocío en suelos de arcilla (lo más común en las áreas costeras y áreas con colinas) y que sus plantas están

expuestas al sol todo el día. Empiece con el horario sugerido y si usted nota síntomas de estrés en las plantas, aumente los minutos gradualmente. Recuerde revisar su sistema de riego en busca de fugas o deficiencias de cobertura antes de aumentar los minutos de riego.

## Horario de riego semanal sugerido

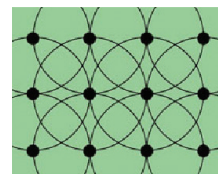
Sistemas de irrigación con aspersores de rocío estándar



Mes	Césped / Pasto	Arboles, arbustos y cubiertas de suelo tolerantes a la sequía	Opción de %**
Enero	2 días, 2 ciclos de 2 minutos	1 día, 2 ciclos de 3 minutos	30%
Febrero	2 días, 2 ciclos de 2 minutos	1 día, 2 ciclos de 3 minutos	30%
Marzo	3 días, 2 ciclos de 3 minutos	2 días, 2 ciclos de 3 minutos	50%
Abril	3 días, 2 ciclos de 4 minutos	2 días, 2 ciclos de 4 minutos	70%
Mayo	3 días, 3 ciclos de 3 minutos	2 días, 3 ciclos de 3 minutos	80%
Junio	3 días, 2 ciclos de 5 minutos	2 días, 3 ciclos de 3 minutos	90%
Julio	4 días, 3 ciclos de 3 minutos	2 días, 3 ciclos de 4 minutos	100%
Agosto	4 días, 3 ciclos de 3 minutos	2 días, 3 ciclos de 4 minutos	100%
Septiembre*	4 días, 2 ciclos de 3 minutos	2 días, 2 ciclos de 4 minutos	70%
Octubre*	3 días, 2 ciclos de 3 minutos	2 días, 2 ciclos de 3 minutos	50%
Noviembre*	2 días, 2 ciclos de 3 minutos	1 día, 2 ciclos de 4 minutos	40%
Diciembre	2 días, 2 ciclos de 2 minutos	1 día, 2 ciclos de 3 minutos	30%

\* En septiembre, la necesidad de agua de las plantas se reduce aproximadamente un 30%, incluso si la temperatura es más alta. Esto es porque los días son más cortos, por lo que la evaporación disminuye. También las plantas comienzan a entrar en una fase latente donde necesitan menos agua. En algunos años, la humedad es también más alta, lo que disminuye la necesidad de agua, ya que ralentiza la velocidad de evaporación. Esta reducción de necesidad de agua continuará en octubre y noviembre.

\*\* Opción de %, se establece con un botón o marca, permite que todos los horarios de las válvulas de irrigación controladas con un controlador electrónico sean aumentados o disminuidos con solo un ajuste por porcentaje.



Para una cobertura pareja, los aspersores de rocío deben tener una separación uniforme de acuerdo con la tasa de rocío.



# Drip irrigation scheduling.



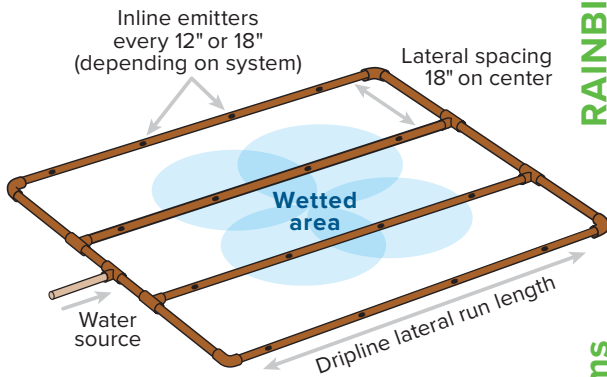
## Inline emitter dripline systems

### STANDARD DRIPLINE SYSTEM - 12" & 18" EMITTER SPACING

#### RAINBIRD XFD systems

RAINBIRD XFD	Emitter spacing 18" Row spacing 18" 0.6 GPH/PR=0.43"	Emitter spacing 12" Row spacing 18" 0.9 GPH/PR=0.96"	% Option**
<b>Month</b>	<b>Drought tolerant plants</b> (Moderate water use Kc=.5)	<b>Drought tolerant plants</b> (Moderate water use Kc=.5)	
January	1 day, 1 cycle of 50 minutes	1 day, 1 cycle of 22 minutes	30%
February	1 day, 1 cycle of 56 minutes	1 day, 1 cycle of 25 minutes	30%
March	2 days, 1 cycle of 39 minutes	2 days, 1 cycle of 17 minutes	50%
April	2 days, 1 cycle of 47 minutes	2 days, 1 cycle of 21 minutes	70%
May	2 days, 1 cycle of 56 minutes	2 days, 1 cycle of 25 minutes	80%
June	3 days, 1 cycle of 37 minutes	3 days, 1 cycle of 16 minutes	100%
July	3 days, 1 cycle of 38 minutes	3 days, 1 cycle of 17 minutes	100%
August	3 days, 1 cycle of 39 minutes	3 days, 1 cycle of 17 minutes	100%
September*	2 days, 1 cycle of 48 minutes	2 days, 1 cycle of 22 minutes	70%
October*	2 days, 1 cycle of 27 minutes	2 days, 1 cycle of 16 minutes	50%
November*	1 day, 1 cycle of 54 minutes	1 day, 1 cycle of 24 minutes	40%
December	1 day, 1 cycle of 44 minutes	1 day, 1 cycle of 20 minutes	30%

### Inline emitter dripline



#### NETAFIM Techline CV systems

NETAFIM Techline CV	Emitter spacing 18" Row spacing 18" 0.4 GPH/PR=0.3"	Emitter spacing 12" Row spacing 18" 0.6 GPH/PR=0.65"	% Option**
<b>Month</b>	<b>Drought tolerant plants</b> (Moderate water Use Kc=.5)	<b>Drought tolerant plants</b> (Moderate water use Kc=.5)	
January	1 day, 1 cycle of 72 minutes	1 day, 1 cycle of 33 minutes	30%
February	1 day, 1 cycle of 80 minutes	1 day, 1 cycle of 37 minutes	30%
March	2 days, 1 cycle of 56 minutes	2 days, 1 cycle of 26 minutes	50%
April	2 days, 1 cycle of 67 minutes	2 days, 1 cycle of 31 minutes	70%
May	2 days, 1 cycle of 81 minutes	2 days, 1 cycle of 37 minutes	80%
June	3 days, 1 cycle of 53 minutes	3 days, 1 cycle of 24 minutes	100%
July	3 days, 1 cycle of 55 minutes	3 days, 1 cycle of 25 minutes	100%
August	3 days, 1 cycle of 56 minutes	3 days, 1 cycle of 26 minutes	100%
September*	2 days, 1 cycle of 69 minutes	2 days, 1 cycle of 32 minutes	70%
October*	2 days, 1 cycle of 52 minutes	2 days, 1 cycle of 24 minutes	50%
November*	1 day, 1 cycle of 78 minutes	1 day, 1 cycle of 36 minutes	40%
December	1 day, 1 cycle of 63 minutes	1 day, 1 cycle of 29 minutes	30%

\* In September, plants' water needs drop by approximately 30% even if the temperature is hotter, because the days are shorter, so evaporation decreases. Also plants begin to go into a dormant phase where they need less water. In some years, humidity is also higher, decreasing plants' water needs as it slows the rate of evaporation. This rapid drop in water needs will continue in October and November.

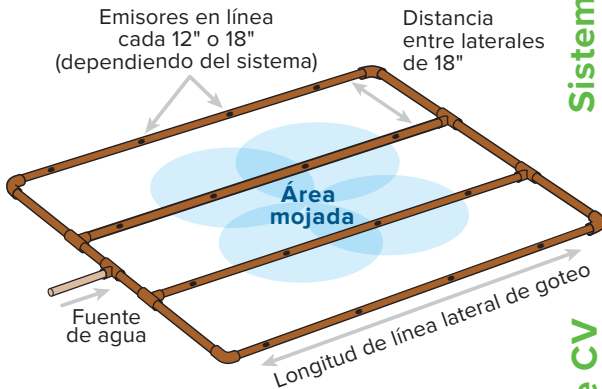
\*\* The % option, either a button or a dial, permits the watering run times for all electric valves managed by a controller to be increased or decreased with just one adjustment by percentage.

# Programación de riego por goteo.

## Tubería de goteros integrados

**Imprima y publique este horario cerca de su controlador.**

### Tubería de goteros integrados



### SISTEMA DE GOTEO ESTÁNDAR - 12" Y 18" ESPACIAMIENTO ENTRE GOTEROS

#### Sistema RAINBIRD XFD

RAINBIRD XFD	Espaciamiento de goteros 18" Espaciamiento entre hileras 18" 0.6 GPH/PR=0.43"	Espaciamiento de goteros 12" Espaciamiento entre hileras 18" 0.9 GPH/PR=0.96"	Opción de %
<b>MES</b>	<b>Plantas tolerantes a la sequía</b> (Uso de agua moderada Kc=.5)	<b>Plantas tolerantes a la sequía</b> (Uso de agua moderada Kc=.5)	
Enero	1 día, 1 ciclo de 50 minutos	1 día, 1 ciclo de 22 minutos	30%
Febrero	1 día, 1 ciclo de 56 minutos	1 día, 1 ciclo de 25 minutos	30%
Marzo	2 días, 1 ciclo de 39 minutos	2 días, 1 ciclo de 17 minutos	50%
April	2 días, 1 ciclo de 47 minutos	2 días, 1 ciclo de 21 minutos	70%
Mayo	2 días, 1 ciclo de 56 minutos	2 días, 1 ciclo de 25 minutos	80%
Junio	3 días, 1 ciclo de 37 minutos	3 días, 1 ciclo de 16 minutos	100%
Julio	3 días, 1 ciclo de 38 minutos	3 días, 1 ciclo de 17 minutos	100%
Agosto	3 días, 1 ciclo de 39 minutos	3 días, 1 ciclo de 17 minutos	100%
Septiembre*	2 días, 1 ciclo de 48 minutos	2 días, 1 ciclo de 22 minutos	70%
Octubre*	2 días, 1 ciclo de 27 minutos	2 días, 1 ciclo de 16 minutos	50%
Noviembre*	1 día, 1 ciclo de 54 minutos	1 día, 1 ciclo de 24 minutos	40%
Diciembre	1 día, 1 ciclo de 44 minutos	1 día, 1 ciclo de 20 minutos	30%

#### Sistema NETAFIM Techline CV

NETAFIM Techline CV	Espaciamiento de goteros 18" Espaciamiento entre hileras 18" 0.4 GPH/PR=0.3"	Espaciamiento de goteros 12" Espaciamiento entre hileras 18" 0.6 GPH/PR=0.65"	Opción de %
<b>MES</b>	<b>Plantas tolerantes a la sequía</b> (Uso de agua moderada Kc=.5)	<b>Plantas tolerantes a la sequía</b> (Uso de agua moderada Kc=.5)	
Enero	1 día, 1 ciclo de 72 minutos	1 día, 1 ciclo de 33 minutos	30%
Febrero	1 día, 1 ciclo de 80 minutos	1 día, 1 ciclo de 37 minutos	30%
Marzo	2 días, 1 ciclo de 56 minutos	2 días, 1 ciclo de 26 minutos	50%
April	2 días, 1 ciclo de 67 minutos	2 días, 1 ciclo de 31 minutos	70%
Mayo	2 días, 1 ciclo de 81 minutos	2 días, 1 ciclo de 37 minutos	80%
Junio	3 días, 1 ciclo de 53 minutos	3 días, 1 ciclo de 24 minutos	100%
Julio	3 días, 1 ciclo de 55 minutos	3 días, 1 ciclo de 25 minutos	100%
Agosto	3 días, 1 ciclo de 56 minutos	3 días, 1 ciclo de 26 minutos	100%
Septiembre*	2 días, 1 ciclo de 69 minutos	2 días, 1 ciclo de 32 minutos	70%
Octubre*	2 días, 1 ciclo de 52 minutos	2 días, 1 ciclo de 24 minutos	50%
Noviembre*	1 día, 1 ciclo de 78 minutos	1 día, 1 ciclo de 36 minutos	40%
Diciembre	1 día, 1 ciclo de 63 minutos	1 día, 1 ciclo de 29 minutos	30%

\* En septiembre, la necesidad de agua de las plantas se reducen aproximadamente un 30%, incluso si la temperatura es más alta, porque los días son más cortos, por lo que la evaporación disminuye. Además, las plantas comienzan a entrar en una fase inactiva en la que necesitan menos agua. En algunos años, la humedad es también más alta, lo que disminuye el uso de agua de las plantas, ya que ralentiza la velocidad de evaporación. Esta disminución rápida de necesidad de agua continuará en octubre y noviembre.

\*\* Opción de %, se establece con un botón o marca, permite que todos los horarios de las válvulas de irrigación controladas con un controlador electrónico sean aumentados o disminuidos con solo un ajuste por porcentaje.