

Water Wise Irrigation

Presented by Brian Clark




WyEast Gardens
EFFICIENT IRRIGATION



Brian Clark

Brian Clark is the Operations Manager at Wyeast Gardens and often the first-person clients meet during site visits. With deep experience and a hands-on approach, he also teaches landscaping through a Workforce Development program at the local Community College, preparing students for rewarding careers.

Together with his wife Emma and their six children, Brian runs Wyeast Gardens as a true family business built on faith, nature, and community. Beyond their work, the Clarks support local culture and events, showing that for them, landscaping is more than a service—it's a lifestyle rooted in connection and purpose.



17563 SE Armstrong CT
HAPPY VALLEY OR 97015
OFFICE: (503) 761-0220
FAX: (503) 761-7406
www.sunrisewater.com

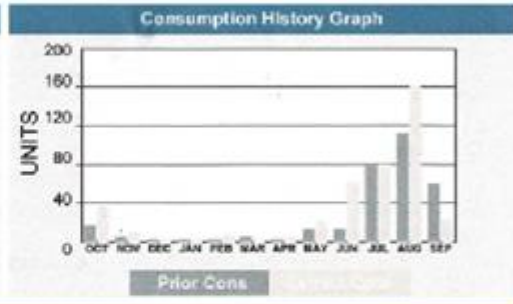
BRIAN CLARK

ACCOUNT SUMMARY	
Previous Activity:	
Previous Bill Amount	\$742.25
Payments	\$790.00
Penalty	\$0.00
Balance Forward	(\$37.75)
The due date applies to current charges only. Any balance forward amounts may be subject to the turnoff process.	
Account No. 019233-001	Total Due \$88.00

Service Address	Read Dates	Meter Number	Prev. Read	Current Read	Units
J	8/5/2025 to 9/2/2025	18189883	2307	2333	26

Water Usage Detail				
	Residential	Current Rates	Current Units	Charge
Tier #1	0-7 Units	\$3.25	7	22.75
Tier #2	8-16 Units	\$4.00	9	36.00
Tier #3	17+ Units	\$4.50	10	45.00
Total Water Charges			26	\$103.75

1 unit = 748 gallons



Message From Sunrise Water

Paperless Billing - Bill Pay - Auto-pay Go to www.sunrisewater.com and click the 'Pay Your Bill Online' button. Register using the following Account Number and Identification Number. Account Number: 019233-001 Identification Number: E63B-4648

PLEASE KEEP THE TOP PORTION FOR YOUR RECORDS - SEE REVERSE SIDE OF BILL FOR MORE INFORMATION - RETURN BOTTOM STUB WITH PAYMENT TO SUNRISE WATER.



17563 SE ARMSTRONG CT
HAPPY VALLEY OR 97015

UTILITY BILL	
Account Number	019233-001
Service Period	8/5/2025 to 9/2/2025
Billing Date	9/25/2025
Due Date	10/20/2025
AMOUNT DUE	\$88.00

8835 1 AV 0.593 20/140 009070 0001:0001

BRIAN CLARK



SUNRISE WATER AUTHORITY
PO BOX 35147 #9049
SEATTLE WA 98124-5147

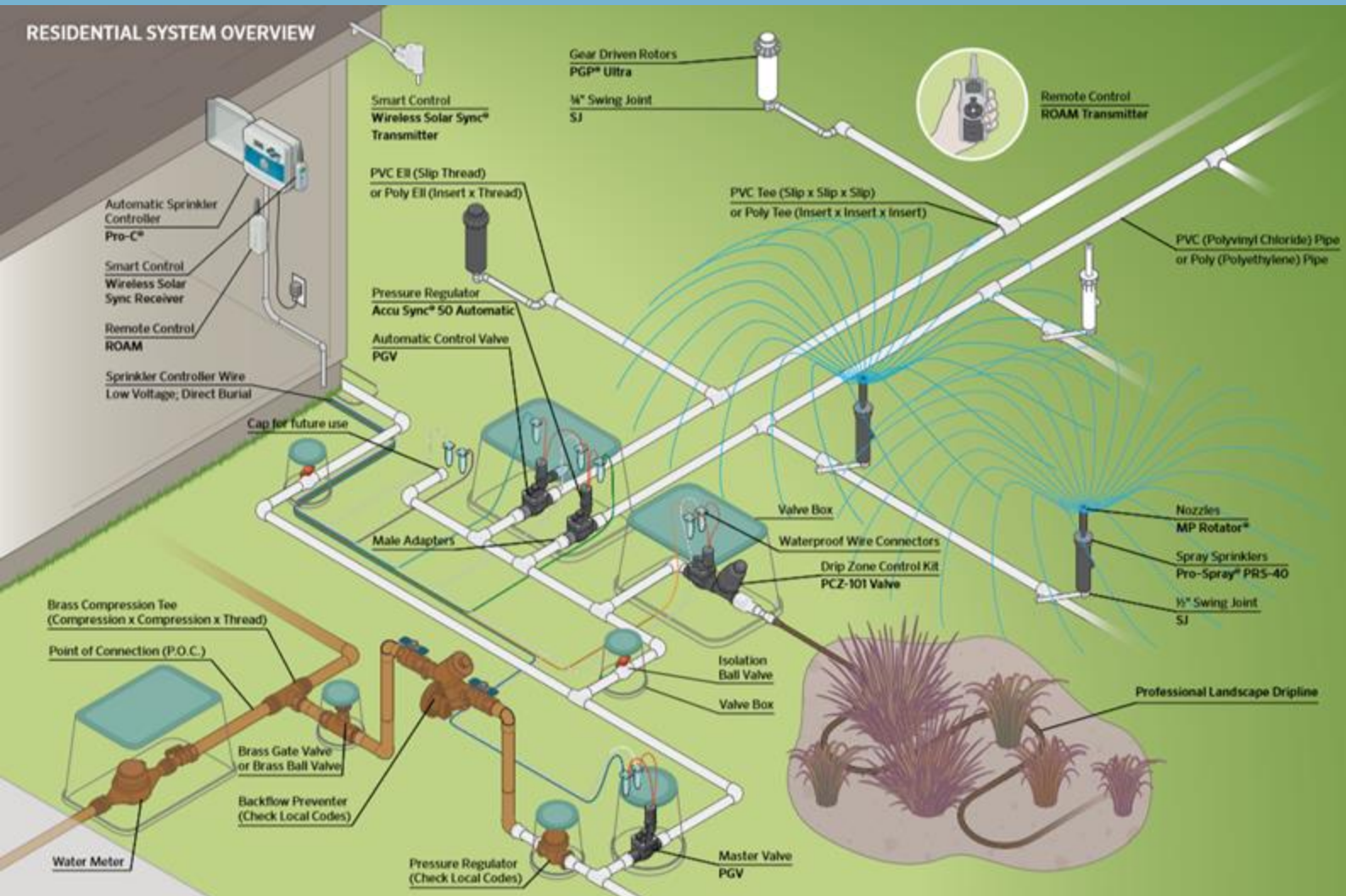
102025 019233001 6 0008600 4

What does water cost?

Understanding your water bill

- **Water Source:** Are you pumping your own water or purchasing from a purveyor?
- **Pumping Costs:** Includes electricity, system wear and tear, and ongoing maintenance.
- **Purveyor Costs:** Typically involves two key charges:
 - *Tiered Pricing: Water is billed per unit (748 gallons), with rates increasing as usage rises.*

Irrigation Basic Components



POC-Backflow

Master shut off valve

Valves

Valve box

Wiring

Waterproof connections

Controller

Inside/outside

Distribution devices

- Rotor
- Drip
- Spray
- MP Rotator



Overhead
Irrigation
Distribution
Devices:
Spray,
Rotor, MP
Rotator

Rotors

Rotor heads: Used since the 1930s; originally for agriculture.

Coverage: Spray distances from 20–80 feet.

Applications: Ideal for large zones—estates, commercial lots, golf courses.

Ease of use: Simple to install, adjust, and available in various styles.

Flow rates: 2–40 GPM at 60 PSI; residential typically 2–9.5 GPM.

Precipitation rate: 0.20–1.75 in/hr—key metric for irrigators.

Sizes: Categorized as small to extra-large.

Local use: Common in Pete’s Mountain and Stafford Road estates.



Essential Spray Heads Facts

Spray Heads

- Regulate water distribution for precise, targeted irrigation
- Available in fixed, adjustable, and rotary models for different needs
- Proper selection and maintenance improve efficiency, conserve water, and ensure optimal results



Spray Nozzles Overview

Fixed vs. Adjustable

Fixed Nozzles

- Provide steady spray pattern & flow rate
- Best for evenly shaped areas needing uniform irrigation

Adjustable Nozzles

- Flexible spray patterns & coverage for varied landscapes
- More prone to clogging & less uniform distribution
- Use fixed nozzles when possible

Choosing the Right Nozzle

- Match to landscape design, watering needs & system efficiency
- Fixed & adjustable nozzles still common, but high-efficiency nozzles are replacing them

Key Specs

- Arc range: **4'–18'** (fixed & adjustable)
- Flow rates: **0.21–3.5 gpm @ 30 psi**
- Precipitation rates: **1.5–3.5 in/hr**



Efficient Watering with MP Rotators

Slow, Even Water Delivery

Apply water uniformly at low rates →
improved efficiency & reduced waste
Matched precipitation rates (except MP
800)

Precipitation measured in in/hr

Minimized Runoff

Multi-stream rotating action allows
water to soak in
Reduces runoff and promotes healthier
soil absorption

Customizable Settings

Adjustable arc & radius for different
lawn shapes

Radius: 10'–30' @ 40 PSI

Flow: 0.3–4 gpm

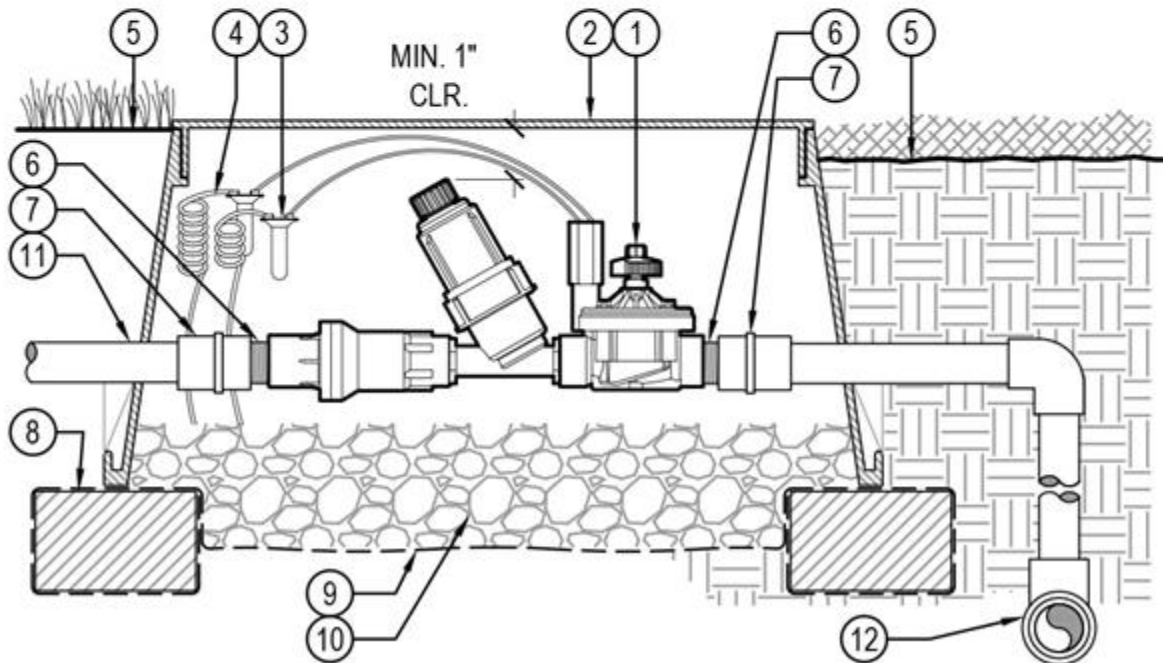
Precipitation: 0.4–0.8 in/hr

Maintain 30–40 PSI for best
distribution uniformity (DU) &
precipitation rate (PPT)



LEGEND

- | | |
|---|--|
| ① HUNTER REMOTE CONTROL VALVE (ICZ) WITH FILTER REGULATOR | ⑦ PVC SLIP X FPT ADAPTOR |
| ② IRRIGATION VALVE BOX: HEAT STAMP LID WITH 'RCV' IN 2" LETTERS | ⑧ BRICK SUPPORTS (4) |
| ③ WATERPROOF CONNECTORS (2) | ⑨ FILTER FABRIC - WRAP TWICE AROUND BRICK SUPPORTS |
| ④ 18"-24" COILED WIRE TO CONTROLLER | ⑩ 3/4" WASHED GRAVEL - 4" MIN. DEPTH |
| ⑤ FINISH GRADE AT ADJACENT SURFACE (TURF OR MULCH) | ⑪ IRRIGATION LATERAL |
| ⑥ SCH. 80 CLOSE NIPPLE, MATCH SIZE TO VALVE | ⑫ MAINLINE LATERAL AND FITTINGS |



Drip Irrigation

Direct Water Delivery

Key Benefits

- Delivers water directly to plant roots → minimizes waste
- Reduces evaporation & runoff → ideal for water conservation
- Ensures plants receive consistent hydration

Performance

- Measured in GPH (gallons per hour)
- Typical flow: 0.6 gph – 3 gpm
- Higher rates = micro-sprays

Distribution Devices

- Tech line
- Emitters
- Micro-sprays
- Soaker tubing

Micro-Sprays

Generally used with ground cover applications, or where planting density is high



Point Source Drip Emitters

- **Highly efficient** – use water more effectively than other irrigation methods
- **Flow range:** 0.5–5 gph
- **Fragile fittings** – require regular monitoring
- **Flexible** – easy to add or remove as needed
- **Caution:** can be installed incorrectly if not careful



Tech Line Drip Irrigation

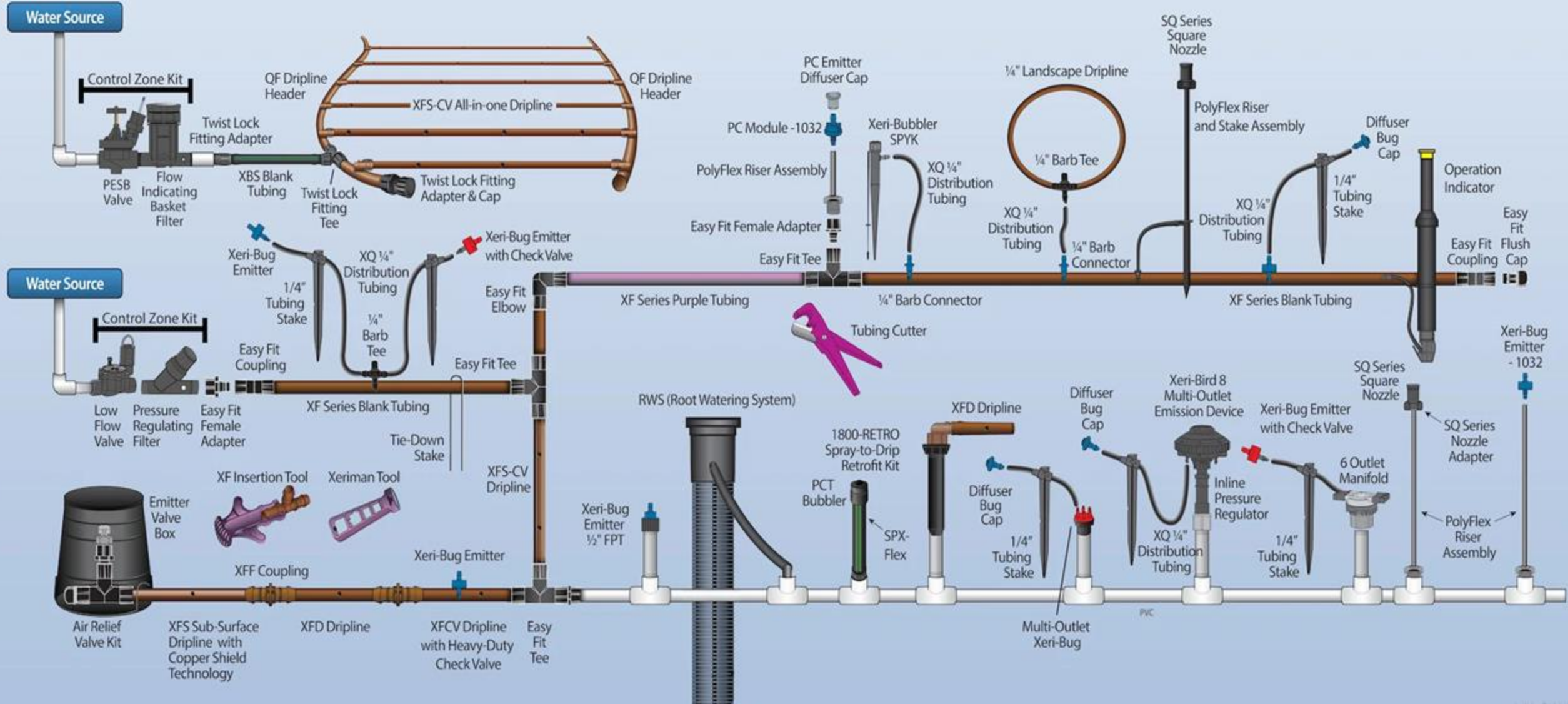
- **Pre-installed emitters** spaced 12–18" apart
- **Flow rate:** 0.6–1.0 gph
- Ideal for **hedge rows** or plantings with similar water needs
- **Low maintenance** and reliable
- **Flexible:** easily added, removed, or repaired



1/4" Soaker Hose

- Commonly used where more water is needed (e.g., annual flower pots in POS drip systems)
- Provides much higher flow rates than standard drip emitters
- Flow rate: ~65 gph @ 30 PSI





Drip System Components

(Lots... and lots... and lots!)

Smart Irrigation Solutions

Technology-Driven Watering

- Smart controllers use sensors & data to deliver the right amount of water

Efficient Water Conservation

- Automatic adjustments reduce waste
- Helps lower utility costs

Remote Access & Control

- Manage systems via smartphone apps
- Provides convenience & flexibility

Environmental & Landscape Benefits

- Promotes healthier landscapes
- Reduces environmental impact through responsible water use



Hunter Hydrowise Controller Overview

Remote Scheduling with Wi-Fi

- Manage irrigation from anywhere with Wi-Fi connectivity
- Easy remote scheduling & control

Smart Watering Technology

- Adjusts schedules based on local weather data
- Optimizes water use & promotes landscape health

User-Friendly Interface

- Intuitive design with app integration



Smart Controllers

- Faster, easier, more efficient gardening
- Work with single-zone or multi-zone systems
- Integrate with sensors (flow meters, soil probes, rain gauges) for smarter scheduling
- Options range from plug-and-play to advanced multi-variable systems
- Rebates often available from local water providers
- ROI: typically, within 3 years through water savings
- More time to enjoy gardening → leads to better gardening



Flow Meters

- **Early Detection** – Monitor system performance to catch issues before they become costly problems
- **Budgeting Tool** – Track usage history to plan and manage water costs
- **Growing Adoption** – Increasingly common as property owners recognize the benefits
- **Rebates & Savings** – Many water providers deduct irrigation use from sewage charges and may offer rebates
- **Cost Link** – Sewage costs are typically proportional to water use



Rebates

<https://www.regionalh2o.org/rebates>



Key Takeaways

Irrigation Methods

Drip: Direct to roots, minimizes waste

Overhead: Covers larger areas, less efficient

Water Costs

Well: electricity & maintenance

Water purveyor: tiered pricing

System Components

Backflow preventer, shut-off valve, valves, wiring, controller, distribution devices

Distribution Devices

Rotors: large areas, adjustable

Spray heads: fixed/adjustable, targeted coverage

MP Rotators: slow, even delivery, reduce runoff

Drip Irrigation

Direct root delivery, reduces evaporation/runoff

Devices: emitters, micro-sprays, tech line, soaker hoses

Smart Irrigation Solutions

Controllers use sensors & weather data

Remote management, rebates available

Flow Meters

Monitor usage, detect issues, assist with budgeting

Rebates

Incentives for smart controllers & water-saving devices

Overall Message

Efficient watering practices + modern irrigation technology = **healthier landscapes, lower costs, and responsible water use.**

Questions?

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