WaterSense® Labeled Homes

Delivering on Efficiency in Las Vegas, Nevada

The U.S. Environmental Protection Agency (EPA) established WaterSense to protect the future of the nation's water supply and to promote water-efficient products, homes, and programs with a simple, easy-to-identify label. WaterSense labeled homes allow families to enjoy the comforts of home while using less water and energy and saving money on utility bills.

To earn the WaterSense label, homes must meet EPA's specification criteria: they must be at least 30 percent more water-efficient than typical new home construction, include WaterSense labeled plumbing products, and be free of water leaks. WaterSense labeled homes can also include features such as: hot water that gets to the tap faster; ENERGY STAR® certified appliances; efficient irrigation equipment; and water-smart landscapes that minimize or eliminate the need for irrigation.

Benefits of WaterSense Certification

For Communities/Water Agencies:

- Preserves the ability to add new housing and grow communities while limiting impacts on water and infrastructure resources.
- Achieves greater water efficiency using a whole-house, building-science approach and system solutions that may not be possible solely with efficient products.
- Encourages builders to design homes with water-efficient features in mind, maximizing water savings at minimal incremental cost.

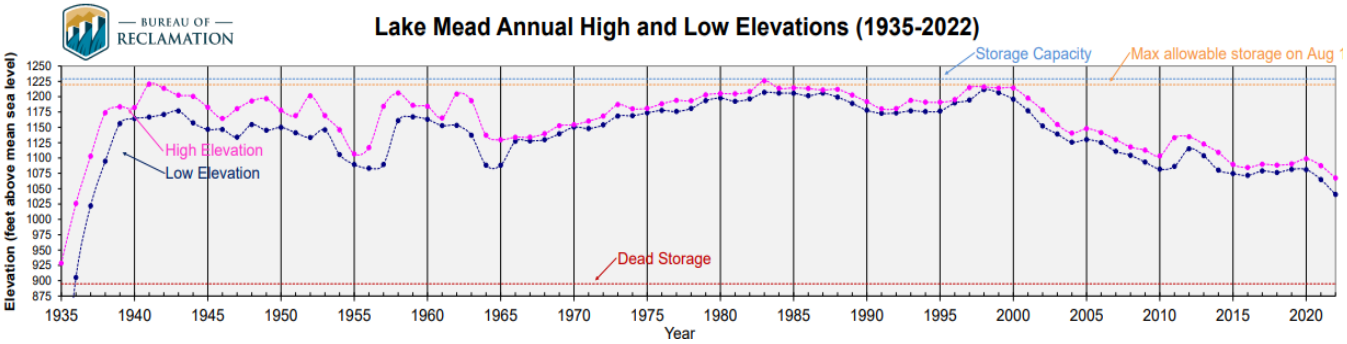
For Builders:

- Mitigates the rising cost of water and utility connection fees.
- Leverages support from existing communities and investors.
- Offers advantages in the permitting and land entitlement processes.
- Supports corporate disclosures and reporting.

Why Water Efficiency Matters to Communities and Builders

In the Southwestern United States, where drought and water supply shortages are an ongoing concern, using water wisely is critical. The Las Vegas area gets most of its water from Lake Mead, which is fed by the Colorado River. As shown in the figure on the next page, the water levels within Lake Mead have been steadily declining since 2000, largely due to declining flows in the Colorado River resulting from drought conditions which have been exacerbated by climate change. Population growth has also contributed to the declining water level. Over the same period, Clark County's population increased by 69 percent, representing nearly one million additional residents. Las Vegas and other areas affected by frequent droughts need to plan communities wisely so as not to overstress water supplies.

WaterSense labeled homes can help preserve the ability to add housing in communities that are water- or infrastructure-constrained by minimizing the impact of new construction on water resources. Simultaneously, they can also mitigate the impact of rising costs of water and connection fees.



Source: U.S. Bureau of Reclamation (www.usbr.gov/lc/riverops.html)

Why Choose WaterSense Labeled Homes

The WaterSense label for homes provides a whole-house approach to water efficiency. The programs that certify homes through WaterSense address specific climate and market conditions by encouraging system and design improvements in addition to efficient products and appliances. This approach helps maximize savings and reduce costs for the builder, the homeowner, and the community.

WaterSense labeled homes can achieve significantly more savings than homes with WaterSense labeled plumbing products alone. Plus, WaterSense labeled homes carry the additional benefit of being independently certified to ensure they are free of leaks and that products and systems are properly installed to maximize savings.

Maximizing Water Savings With WaterSense Labeled Homes

The table on the next page illustrates the features that may be included under four scenarios in Las Vegas. This example uses a typical 2,400-square-foot home with an average-sized household (2.61 occupants) on a 10,000-square-foot lot that includes 5,826 square feet of conventional, irrigated turf (unless otherwise specified). Assumptions for a typical home are based on national averages.

The **baseline home** includes products meeting federal efficiency standards and other features typical of new construction. The **home following the Mandatory Checklist for WaterSense Labeled Homes** includes WaterSense labeled toilets, faucets, and showerheads, but no additional water-efficient features. The **home meeting Las Vegas turf limits and Nevada standards** is required to reduce turf in the landscape and meet more rigorous product efficiency criteria for certain plumbing products. Finally, the example **WaterSense labeled home** incorporates a variety of water-efficient indoor and outdoor features that meet the water efficiency requirement for WaterSense labeled homes and result in substantially more water savings.

This is just one example of a home that has earned the WaterSense label—other design configurations could also meet the requirement. The example shows that for a hot and dry climate such as Las Vegas', improvements limited to indoor water efficiency will not be sufficient to achieve

the 30 percent threshold. The home will generally need to focus on maximizing outdoor water savings (e.g., by reducing turf and using non-irrigated or natural areas to reduce irrigable landscape area) to ensure it is at least 30 percent more water-efficient than typical new construction.

Feature	Baseline Home	Home Meeting WaterSense Mandatory Checklist	Home Meeting Las Vegas Turf Limits and Nevada Appliance Efficiency Standards	Example WaterSense Labeled Home in Las Vegas*
Toilets	1.6 gpf	1.28 gpf	1.28 gpf	1.1 gpf
Showerheads	2.5 gpm	2.0 gpm	2.0 gpm	2.0 gpm
Lavatory Faucets	2.2 gpm	1.5 gpm	1.5 gpm	1.5 gpm
Kitchen Faucets	2.2 gpm	2.2 gpm	2.2 gpm	1.8 gpm
Dishwashers	5.0 gpc	5.0 gpc	5.0 gpc	3.5 gpc (ENERGY STAR)
Clothes Washers	6.5 IWF	6.5 IWF	6.5 IWF	4.3 IWF (ENERGY STAR)
Hot Water Delivery	Standard	Standard	Standard	More efficient hot water delivery
Landscape and Irrigation	Turf irrigated with standard fixed spray sprinklers and timer-based controller	Turf irrigated with standard fixed spray sprinklers and timer-based controller	Landscape of 25% turf and 75% non-turf irrigated with standard fixed spray sprinklers and timer-based controller	75% of landscape is non-turf design with 27% of that not irrigated; irrigated non-turf has pressure-compensating drip irrigation; turf irrigated with WaterSense labeled spray sprinkler bodies; WaterSense labeled irrigation controller
Total Estimated Annual Water Use	267,000 gallons	252,000 gallons	240,000 gallons	<187,000 gallons
Total Estimated Annual Water and Percent Savings From Baseline	**0 gallons** **0% savings**	**15,000 gallons** **3 to 8% savings**	**27,000 gallons** **3 to 18% savings**	**≥80,000 gallons** **≥30% savings**

Feature meets federal standard or common construction practices

Feature meets WaterSense or ENERGY STAR criteria

Feature achieves greater efficiency level than WaterSense product specification criteria

gpf = gallons per flush; gpm = gallons per minute; gpc = gallons per cycle; IWF = integrated water factor
* For example purposes only. Home could qualify with a different combination of features, and a different home with these features is not guaranteed to achieve WaterSense certification.

Learn More

Interested in learning more about WaterSense and how it can benefit your community? Visit www.epa.gov/watersense.