



# WaterSense® Labeled Homes

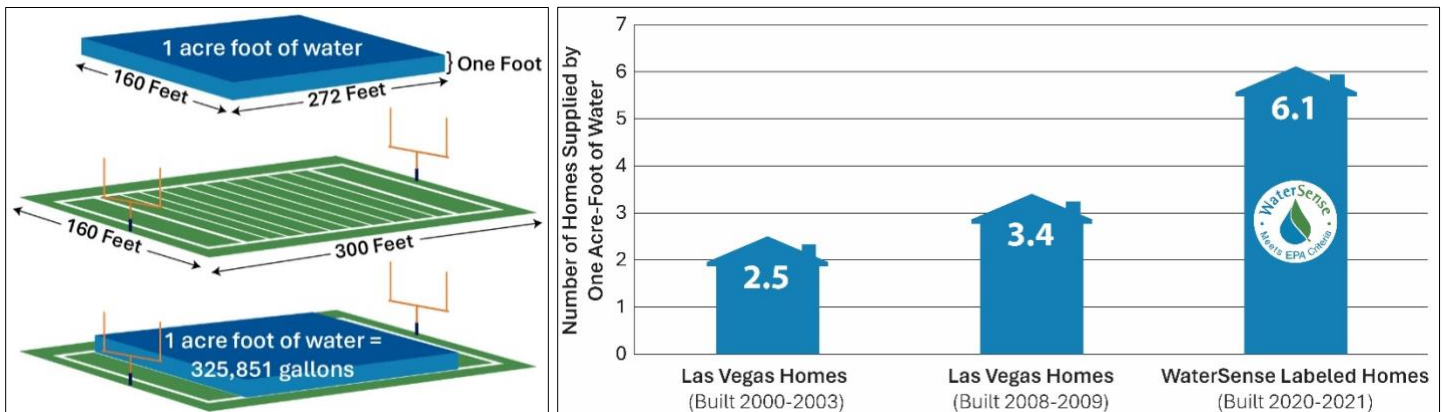
## A Tool for Water and Land Use Planning

The U.S. Environmental Protection Agency (EPA) established WaterSense to promote water-efficient products, homes, and programs with a simple, easy-to-identify label. EPA's WaterSense labeled homes program helps make the most of limited community water supplies while also driving the market for water-efficient home building and providing utility savings for homeowners. Working with regional and national Home Certification Organizations, WaterSense certifies homes for water efficiency and performance. Based on the water savings WaterSense labeled homes offer, regions can leverage the program to support and help maximize new housing in response to population growth while minimizing stress to limited water resources.

### WaterSense Labeled Homes as a Strategy for Water and Land Use Planning

In regions where drought and water supply are an ongoing concern, WaterSense labeled homes can serve as a strategic tool for land use planners, water district managers, and others seeking to protect existing water resources without limiting growth. Building WaterSense labeled homes—which use at least 30 percent less water than typical new construction—maximizes water efficiency at the lowest-cost intervention point (i.e., when the home is being designed and built) and reduces the impact on existing water resources. Water availability is essential to existing and new communities and directly impacts the total number of households that a fixed amount of water can support. Coordination between local and regional planning officials and water districts helps ensure local water supply can meet the needs of additional homes without incurring the high cost of acquiring new water resources.

Just one WaterSense labeled home saves a significant amount of water, but when considering a development or community of WaterSense labeled homes, the savings and potential impact on housing density are even more substantial. For example, EPA's pilot in the Las Vegas area (see next page) illustrated the potential increase in the number of houses one acre-foot (approximately 326,000 gallons) of water can support, provided they are WaterSense labeled. For older, typical homes built in the region during the early 2000s, one acre-foot of water is needed per year for every 2.5 homes. By contrast, the pilot found that **one-acre foot of water can supply more than six WaterSense labeled homes for a year in that region**. The chart below illustrates how communities with limited water resources may be able to build more homes if they adopt WaterSense labeled homes.

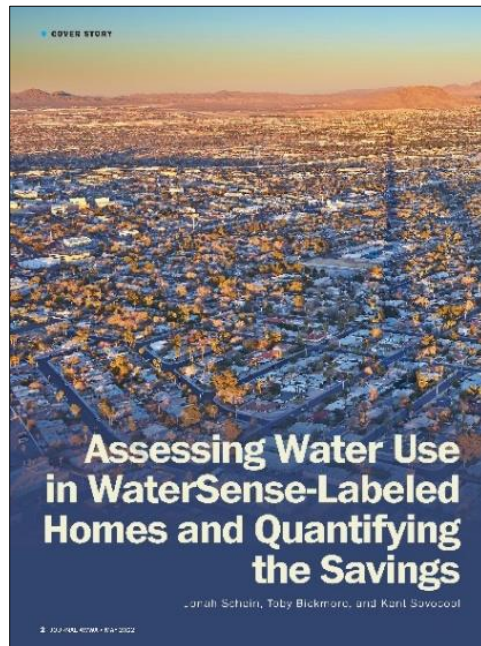


The figure above left compares the size of a football field to that of an acre-foot of water. The figure above right shows the number of homes that can be supplied by one acre-foot of water in the greater Las Vegas area.

## Realized Water Savings

EPA released Version 2 of its WaterSense labeled homes program in 2021. Prior to its release, EPA piloted the program in Las Vegas in 2020. The pilot study—published in the *Journal of the American Water Works Association (AWWA)*—compares the observed water use of homes against modeled predictions and independent field data and highlights areas for future research.<sup>1</sup> **WaterSense labeled homes had an average water use of 53 kilogallons (kgal) per year and reduced water use by more than 30 percent**, which is the program’s minimum efficiency level for WaterSense labeled homes. Results from the pilot show that while market and industry factors external to the program are also influencing water use and could be responsible for some of the reductions, the savings attributable to WaterSense labeled homes was significant.

EPA compared the water use results from the pilot study against several other studies and data sources related to household water consumption. The data shown in the table below reinforce that WaterSense labeled homes are using significantly less water and performing well relative to other homes in the country and the region.



Observed Water Consumption From Residential Field Studies			
Source	Scope	Study Period and Home Type	Average Water Use (kgal/household/year)
<i>Residential End Uses of Water, Version 2</i>	Henderson, Nevada	Existing homes monitored from 2010 to 2013	141
Southern Nevada Water Authority (SNWA)	Greater Las Vegas Area	New homes built 2000 to 2003	129
SNWA	Greater Las Vegas Area	New homes built 2008 to 2009	97
WaterSense Labeled Homes Pilot Study	Greater Las Vegas Area	New WaterSense labeled homes built 2020 to 2021	53

## Learn More

Interested in learning more about WaterSense and how it can benefit your community? Visit [www.epa.gov/watersense](http://www.epa.gov/watersense).

<sup>1</sup> Schein, Jonah, et al. “Assessing Water Use in WaterSense-Labeled Homes and Quantifying the Savings.” *Journal AWWA*. May 2022. Pages 10-21. [www.epa.gov/system/files/documents/2022-08/ws-Journal-AWWA-2022-Assessing-WaterUse-WaterSense-Labeled-Homes-Quantifying-Savings.pdf](http://www.epa.gov/system/files/documents/2022-08/ws-Journal-AWWA-2022-Assessing-WaterUse-WaterSense-Labeled-Homes-Quantifying-Savings.pdf).