

# THE GreenGUIDE

environmental change begins at home.

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This page can be found on the web at:

<http://www.thegreenguide.com/products/Appliances/Dishwashers>

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## Dishwashers

### What To Look For

The upfront costs of some highly efficient dishwashers can be daunting, but while all appliances designed for efficiency cost more, the long-term savings are significant. They can reduce total water use by one-third, which translates to an annual savings of \$95.

The following are basic criteria to use when choosing a new unit:

Energy Star qualified models typically use one-third less water and 41 percent less energy than non-qualified models. The percentage above indicates the percent more energy-efficient each dishwasher is; Energy Star does not currently factor in water savings for their ratings.

If your current model is at least 10 years old, it likely uses between eight and 15 gallons of water per cycle (gpc) when set on "normal," while the average new Energy Star-rated dishwasher uses four gallons per load. A newer model can save more than 1,000 gallons of water annually.

Compact capacity models hold eight place settings plus six serving pieces, while standard capacity models hold more. If your home sees a lot of dirty dishes, a compact model will use more energy and water if it's run more frequently to handle multiple loads.

### Shopping and Usage Tips

+Look for models with several cycle selections. If your dishes don't need heavy-duty washing, you can use a light or energy-saving cycle and less water.

+At the store, compare the energy- and water-consumption costs of one model to another using the yellow "EnergyGuide" label on the product.

+Choose a model with an air-dry feature, which cuts down on energy use.

### Usage Tips

+Don't run the dishwasher unless it is full.

**+Instead of pre-rinsing dishes, scrape food into the garbage or rinse them in a pan of water in the sink. Adding an additional 20 gallons per load on average, pre-rinsing can negate any water-saving efforts you've achieved with your dishwasher.**







**+Save energy by air-drying or hand-drying dishes rather than using the washer's drying function.**

**+If you must hand-wash dishes, do so efficiently. Get two basins, one filled with hot, soapy water for washing and another filled with cold water for rinsing. Start with the smaller, less dirty items first and work your way up to larger, dirtier ones.**

## Product Comparisons

Depending on your individual habits, hand-washing dishes may use up to 50 percent more water than a water-saving, energy-efficient dishwasher. If you're in the market to purchase a new one, choose one of these Energy Star-rated models, which can save you 13 percent on energy and as much as 1,200 gallons of water a year.

Wondering what these table headings mean? They're the criteria we used to choose and evaluate the products in the chart below. Learn more about their importance in [What To Look For.](#)"

Name	Energy Star Rating	GPC (normal cycle)	Place Setting Capacity	MSRP	Purchasing Information	Reader Rating
Asko D3531XLFI	141%	3	12+	\$1,500	<a href="http://www.askousa.com">www.askousa.com</a> , 800-898-1879	Avg. Rating 
Asko D3531XLHD	141%	3	12+	\$1,600	<a href="http://www.askousa.com">www.askousa.com</a> , 800-898-1879	Avg. Rating 
Kenmore 1332	110%	4.8-6	5	\$800	<a href="http://www.kenmore.com">www.kenmore.com</a> , 800-349-4358	Avg. Rating 
Viking DFUD142	102%	4.5	16	\$1,600	<a href="http://www.vikingrange.com">www.vikingrange.com</a> , 888-845-4641	Avg. Rating 
Viking DFUD042	100%	4.5	16	\$1,200	<a href="http://www.vikingrange.com">www.vikingrange.com</a> , 888-845-4641	Avg. Rating 
LG LDF7810	59%	5	16	\$800	<a href="http://www.lge.com">www.lge.com</a> , 800-243-0000	Avg. Rating 
Bosch SHE45C02UC	48%	4-13	10-12	\$700	<a href="http://www.boschappliances.com">www.boschappliances.com</a> , 800-944-2904	Avg. Rating 
Whirlpool DU1100XTP	43%	6	14	\$435	<a href="http://www.whirlpool.com">www.whirlpool.com</a> , 866-698-2538	Avg. Rating 

## The Backstory

Roughly 26 billion gallons of water are used each day in the United States, about 300 million gallons of which go to operate dishwashers. The average person in the U.S. uses a total of 100 gallons daily. Residential water use accounts for 13 percent of the water used in this country (agriculture, at 41 percent, and industry, at 46 percent, are the biggest consumers). Considering that only 3 percent of the earth's water is fit for human consumption, and the majority is sealed up in ice caps, preserving water is an urgent task.

## Environmental Issues

Household water consumption has a significant impact on aquatic life, especially when water supplies come from freshwater lakes and streams. The Rio Grande, recently named one of the World Wildlife Fund's Top 10 Rivers at Risk, has been so overextracted that saltwater from the Gulf of Mexico has begun moving upstream and endangering native species. So far, 32 of the river's 121 native species have been displaced as a result of increased salinity. And in New Mexico, supplying Santa Fe with water has transformed the Santa Fe River, named America's Most Endangered River in 2007 by the non-profit American Rivers, into a dusty ditch for most of the year.

Just like the Rio Grande, city water supplies are succumbing to saltwater intrusion, which occurs when increased pumping of groundwater allows saltwater pools to infiltrate freshwater supplies, making water unfit for human use. In response, cities are installing energy-intensive desalination plants, which require more fossil-fuel-derived power that, in turn, contributes to global warming. To date, desalination plants are under construction in Tampa Bay, Florida, and cities across California, with even more plants being proposed for that state.

## Social Issues

According to a recent government survey, the Environmental Protection Agency reports that at least 36 states are anticipating local, regional or statewide water shortages by 2013. The scarcity of any necessary natural resource leads to political conflict, and many states are in the midst of water wars and disputes over water rights.

Developers in south Florida, for instance, recently requested additional water supplies to be diverted from their northern neighbors, infuriating citizens in north Florida. Rather than encouraging water conservation, the state responded by providing funding for costly wastewater disinfection plants. Out West, water wars have raged for decades, mainly among farmers, who need water for their crops, and city water consumers. Cities are gradually taking more water, which could mean a long-term struggle for small farmers. Denver Water, which already sends over 15 billion gallons of water a year to the highly populated Front Range region, is proposing to send an additional five billion gallons through an expansion of the area's water supply, which currently diverts water from 40 points on mountain tributaries. Local municipal and environmental groups are fighting these efforts and campaigning to restore water levels in order to preserve the watershed's threatened trout populations.

In Nevada, Las Vegas water officials are campaigning for rights to the states rural groundwater, hoping to redirect 65 billion gallons of groundwater a year to support the city's phenomenal growth rate, a deal which could potentially deprive farmers of well water for irrigation.

## Related Articles

From the *Green Guide*:

"American Waters: What Hurts, What Helps," [www.thegreenguide.com/doc/121/water](http://www.thegreenguide.com/doc/121/water)

"Virtuous Cycles," [www.thegreenguide.com/doc/120/laundry](http://www.thegreenguide.com/doc/120/laundry)

"A Calculated Loss: How to Reduce Your Global Warming Emissions,"

[www.thegreenguide.com/doc/119/calculator](http://www.thegreenguide.com/doc/119/calculator)

**From Outside Sources:**

**Energy Star:** [www.energystar.gov](http://www.energystar.gov), 888-STAR-YES

**America's Most Endangered Rivers 2007.** American Rivers, [www.americanrivers.org](http://www.americanrivers.org).

**Hemminger, Pat.** "Damming the Flow of Drugs into Drinking Water." *Environmental Health Perspectives*. October 2005, [www.ehponline.org/members/2005/113-10/spheres.html](http://www.ehponline.org/members/2005/113-10/spheres.html).

**"How to Buy an Energy-Efficient Home Appliance."** Federal Trade Commission and Department of Energy. June 2000, [www.ftc.gov/bcp/online/pubs/homes/applnces.shtm](http://www.ftc.gov/bcp/online/pubs/homes/applnces.shtm).

**"Residential Product Guides: Dishwashers."** Flex Your Power, [www.fypower.org/res/tools/products\\_results.html?id=100125](http://www.fypower.org/res/tools/products_results.html?id=100125).

**"Using Water Efficiently: Ideas for Residences."** EPA, [www.epa.gov/WaterSense/pubs/res.htm](http://www.epa.gov/WaterSense/pubs/res.htm).

--By Solvie Karlstrom, June 2007

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