

8.1.2 Average Energy Intensity of Public Water Supplies by Location (kWh per Million Gallons)

<u>Location</u>	<u>Sourcing</u>	<u>Treatment (1)</u>	<u>Distribution</u>	<u>Wastewater</u>	<u>Total</u>
United States (2)	836	627	437	1,363	3,263
United States (3)	2,230	65	(6)	1,649	2,295
Northern California Indoor	2,117	111	1,272	1,911	5,411
Northern California Outdoor	2,117	111	1,272	0	3,500
Southern California Indoor	9,727	(5) 111	1,272	1,911	13,021
Southern California Outdoor	9,727	111	1,272	0	11,110
Iowa	2390	(6)	380	1,570	4,340
Massachusetts	1,500	(6)	(6)	1,750	3,250
Wisconsin Class AB (4)	-	-	-	not included	1,510
Wisconsin Class C (4)	-	-	-	not included	1,850
Wisconsin Class D (4)	-	-	-	not included	1,890
Wisconsin Total (4)	-	-	-	not included	1,601

Note(s): 1) Treatment before delivery to customer. 2) Source: Electric Policy Research Institute (EPRI) 2009. Wastewater estimated based on EPRI 2002. 3) Source: TIAx 2006. 4) Based on water treatment facility size: Class AB >4000 customers, Class C: 1000 to 4000, Class D <1000. Median energy use value reported. 5) Southern California sourcing energy is high because of energy used to pump water from Northern California. 6) Included with Sourcing.

Source(s): Electric Power Research Institute, Program on Technology Innovation: Electric Efficiency Through Water Supply Technologies A Roadmap, Publication 1019360, 2009; EPRI, Water & Sustainability (Volume 4): U.S. Electricity Consumption for Water Supply & Treatment – The Next Half Century, 2002; DOE/TIAx LLC, Commercial and Residential Sector Miscellaneous Electricity Consumption: Y2005 and Projections to 2030, 2006; California Energy Commission/Navigant Consulting, Refining Estimates of Water Related Energy Use in California, Public Interest Energy Research Program, CEC-500-2006-118; Iowa Association of Municipal Utilities/Iowa Energy Center, Energy Consumption and Costs to Treat Water and Wastewater in Iowa Part II: Survey Results Tables and Charts, 2002; EPA, Ensuring a Sustainable Future: An Energy Management Guidebook for Wastewater and Water Utilities, 2008; and Energy Center of Wisconsin, Energy Use at Wisconsin's Drinking Water Utilities, 2003.