SUMMARY

Activity	Blue water (gal/day)	Notes	References
PRIMARY USE - water I personally use to perform daily tasks			
Drinking (pure water)	0.26	estimate 1 L/day	drink approx. one 1-L water bottle per day
Cooking	1.3	(0.15 prep + 0.5 in food) gal/meal avgerage for restaurant cooking, 2 meals per day	[5]
Toilet	8.0	5 flushes per day @ 1.6 gpf	gpf label on dorm room toilet
Shower	18.75	one 15-min shower every other day @2.5 gpm	gpm label on dorm room shower head
Sink	1.418	5 hand wash (10 s each), 2 contact rinses (6 s each), 2 toothbrush (3 s each); sink @ 1.25 gpm	measure sink flowrate (see right)
Dishwashing	0.28	commercial rack conveyor dishwasher (1.4 gal/rack); about 5 items on 25 item rack per day	[10]
Laundry	1.857	1 large load per week @ 13 gal per load (Energy Star average)	[4]
Car wash	0.164	2 car washes per year @ 30 gal/vehicle	[3]
TOTAL (primary)	**32.0**		
SECONDARY USE - water used to produce the food, fuel, and electricity that I consume			
Food production	35.0	includes food production, packaging, transport	[2][8] - see table on next page
Driving	3.3	approx. 30 mi/day @ 0.11 gal/mi for light duty vehicle	measure mileage, [7]
Electricity	3.536	from US average per capita electricity, ERCOT electricity source mix, and water intensity of electrictity generation by source	[1][6][9] - see table on next page
TOTAL (secondary)	**41.8**		
TOTAL (primary + secondary)	**73.8**		

Measure Sink Flowrate	
volume filled (gal)	0.149
time required (min)	0.119
flowrate (gpm)	1.251

REFERENCES

[1]	*Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2016 (NST-EST2016-01)*. United States Census Bureau. Web. 11 Jan. 2017. <http://www.census.gov/data/tables/2016/demo/popest/nation-total.html>.
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[3]	Brown, Chris. "Water Conservation in the Professional Car Wash Industry." International Carwash Association. Web.
[4]	"Clothes Washers." *Energy Star* . US Environmental Protection Agency. Web. 13 Jan. 2017. <https://www.energystar.gov/products/appliances/clothes_washers>.
[5]	"Commerical Water Use and Potential Savings, Appendix E." Pacific Institute. Web. 13 Jan. 2017. <http://pacinst.org/app/uploads/2013/02/appendix_e3.pdf>.
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[7]	King, Carey W., and Michael E. Webber. "Water Intensity of Transportation." *Environmental Science & Technology* 42.21 (2008). American Chemical Society, 24 Sept. 2008. Web. 11 Jan. 2017.
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[9]	*Electric Power Monthly* . US Energy Information Administration, 23 Dec. 2016. Web. 11 Jan. 2017. <http://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_01>.
[10]	"Water Efficiency: Kitchen and Food Preparation." N.C. Division of Pollution Prevention and Environmental Assistance, May 2009. Web. 13 Jan. 2017.

FOOD PRODUCTION

Food category	Estimated consumption (g/day)	Blue water footprint (m^3/ton) [8]	Estimated Blue Water Footprint	
			m^3/day	gal/day
Sugars	30.0	52	0.0015600	0.41
Vegetables	100.0	43	0.0043000	1.14
Fruits	100.0	147	0.0147000	3.88
Cereals	250.0	228	0.0570000	15.06
Oil crops	10.0	220	0.0022000	0.58
Beef	24.3	525	0.0127573	3.37
Pork	2.0	645	0.0013061	0.35
Chicken	12.1	187	0.0022720	0.60
Egg	12.1	130	0.0015795	0.42
Milk	473.1	60	0.0283834	7.50
Butter	4.0	324	0.0013122	0.35
Cheese	16.2	310	0.0050219	1.33
TOTAL	**1034**	-	**0**	**34.97**

ELECTRICITY PRODUCTION

Electricity use						
2015 residential electricity sales (kWh) [9]	1.4E+12					
2015 US population [1]	320,896,618					
average consumption (kWh/day/person)	11.95281042					
Associated water consumption						
Power Source	**TX Electricity Generation (all sectors)**		**Per Capita Residential Electricity Generation (kWh/day/person)**	**Water Consumption**		
	Net Generation Jan-Oct 2016 (GWh) [9]	**% Generation of TX electricity**		**Consumption Rate (L/MWh) [6]**	**Consumption Rate (gal/kWh)**	**Total Consumption (gal/day/person)**
Natural Gas	198,122	0.51260	6.13	683.9	0.1790	1.097
Coal	99,410	0.25720	3.07	1,971.2	0.5159	1.586
Wind	47,671	0.12334	1.47	4.0	0.0010	0.002
Nuclear	34,974	0.09049	1.08	2,431.1	0.6363	0.688
Other Gases	2,171	0.00562	0.07	na	na	na
Biomass	1,458	0.00377	0.05	1,800.0	0.4711	0.021
Hydroelectric (conventional)	1,023	0.00265	0.03	17,000.0	4.4492	0.141
Other Energy Sources	595	0.00154	0.02	na	na	na
Solar (assume PV)	915	0.00237	0.03	15.0	0.0039	0.000
Petroleum Coke	102	0.00026	0.00	1,088.7	0.2849	0.001
Petroleum Liquids	65	0.00017	0.00	1,088.7	0.2849	0.001
Total	**386,506**	**1**	**11.953**			**3.536**
na = data not available						