

Appendix D – Additional Results

Baseline Water Demand

Municipal & Industrial

Table A1. State-Level Baseline Water Demand, as Volumetric and Normalized Demands (Per Capita for Residential and Utility Water Loss and Water Intensity for CII), by Sector.

State	Population (millions)	Municipal & Industrial		Residential		CII		Utility Water Loss	
		Volumetric Demand (maf)	Per Capita Demand (gpcd)	Volumetric Demand (maf)	Per Capita Demand (gpcd)	Volumetric Demand (maf)	Water Intensity (gpsfy)	Volumetric Demand (maf)	Per Capita Demand (gpcd)
AK	0.706	0.123	152	0.0700	88.5	0.0425	17.5	0.0107	15.7
AL	4.89	1.68	380	0.583	106	0.513	68.2	0.584	87.0
AR	2.94	0.699	295	0.185	56.2	0.295	63.8	0.219	64.0
AZ	7.01	1.27	193	0.744	94.7	0.458	32.4	0.0709	9.29
CA	38.5	5.11	132	3.36	78.0	1.34	16.6	0.403	9.08
CO	5.65	0.763	131	0.400	63.2	0.315	22.3	0.0481	6.61
CT	3.50	0.625	209	0.240	61.3	0.308	44.8	0.0768	25.2
DC	0.641	0.0872	131	0.0283	39.4	0.0255	16.8	0.0334	45.9
DE	0.972	0.102	123	0.0402	36.9	0.0362	22.9	0.0258	23.1
FL	21.1	3.68	208	1.80	76.0	1.27	38.5	0.612	26.3
GA	10.5	2.22	265	0.720	61.5	1.02	59.2	0.477	41.5
HI	1.41	0.251	171	0.140	88.5	0.0850	24.4	0.0259	15.7
IA	3.10	0.753	237	0.391	113	0.204	27.3	0.159	50.1
ID	1.80	0.345	208	0.236	117	0.0988	29.5	0.0111	10.5
IL	12.5	1.95	154	0.891	63.8	0.507	17.8	0.556	41.5
IN	6.61	0.932	154	0.406	54.8	0.307	21.9	0.218	38.7
KS	2.85	0.448	160	0.162	50.7	0.144	23.6	0.143	45.0
KY	4.39	1.71	460	0.539	110	0.733	95.7	0.439	87.8
LA	4.52	1.22	301	0.516	102	0.406	53.7	0.293	52.2
MA	6.74	0.877	132	0.233	30.8	0.407	28.9	0.238	21.8
MD	6.03	0.552	96.9	0.306	45.4	0.0824	9.09	0.163	26.7
ME	1.33	0.258	244	0.108	72.5	0.129	52.9	0.0207	27.1
MI	9.82	1.19	142	0.372	33.8	0.461	24.1	0.354	42.6
MN	5.56	0.830	154	0.385	61.9	0.243	19.2	0.203	39.8
MO	6.01	1.01	182	0.357	53.1	0.365	29.7	0.285	47.4
MS	2.86	0.694	264	0.207	64.7	0.182	40.9	0.304	87.0
MT	1.06	0.161	147	0.106	89.2	0.0476	18.1	0.00705	8.42
NC	10.2	1.43	168	0.565	49.5	0.506	30.0	0.358	36.0
ND	0.749	0.135	181	0.0389	46.4	0.0621	33.4	0.0336	43.6
NE	1.91	0.570	331	0.222	103	0.222	57.2	0.126	70.6

NH	1.34	0.168	153	0.0596	39.7	0.0824	32.0	0.0259	25.9
NJ	9.08	1.38	150	0.375	36.9	0.243	12.9	0.765	77.3
NM	2.07	0.307	177	0.191	82.1	0.0980	31.5	0.0182	8.24
NV	3.07	1.23	393	0.645	188	0.503	66.6	0.0780	22.8
NY	19.4	5.23	288	2.30	106	1.45	39.9	1.49	73.0
OH	11.5	1.85	178	0.572	44.4	0.778	33.2	0.504	43.1
OK	3.85	0.585	187	0.242	56.0	0.195	34.3	0.147	36.6
OR	4.13	0.892	226	0.503	109	0.312	35.5	0.0772	19.7
PA	12.6	1.28	109	0.545	38.7	0.424	16.5	0.315	24.7
RI	1.05	0.194	228	0.0721	61.3	0.0926	51.8	0.0293	25.2
SC	5.00	0.877	211	0.296	52.8	0.266	33.8	0.315	65.3
SD	0.857	0.155	194	0.0604	62.9	0.0579	31.8	0.0362	44.2
TN	6.78	1.57	264	0.491	64.7	0.617	52.5	0.458	55.7
TX	28.6	5.24	210	2.25	70.2	1.73	37.3	1.26	37.8
UT	3.23	0.728	225	0.321	88.8	0.368	46.0	0.0391	10.3
VA	8.39	1.15	166	0.469	49.9	0.422	30.6	0.260	32.5
VT	0.619	0.110	204	0.0426	61.3	0.0546	42.9	0.0128	25.7
WA	7.54	1.27	173	0.723	85.6	0.387	25.3	0.159	18.2
WI	5.75	0.925	175	0.333	51.7	0.360	26.5	0.231	50.5
WV	1.74	0.283	204	0.108	55.3	0.0971	37.6	0.0779	45.9
WY	0.564	0.109	163	0.0657	104	0.0381	17.9	0.00519	9.54

Residential

For the Residential sector, we estimated a total current-day water demand of 22.9 million acre-feet per year, corresponding to 20.4 billion gallons per day or 63.2 gallons per capita per day. Of this amount, indoor water use represents 11.1 million acre-feet per year (48.6% of total), and outdoor use represents 11.7 million acre-feet per year (51.4% of total).

Outdoor water use (as a percentage of total demand) ranges from 7.81% to 73.1%. States in the western United States have the highest per capita water use, largely driven by outdoor water use. This trend largely aligns with the locations of water providers from the Billing Dataset with moderate and high seasonality. While several water providers in these states have implemented efforts to curb outdoor water use, these findings suggest that a wider uptake of these efforts is still needed, especially in states experiencing high population growth rates or in areas where these efforts have not been implemented.

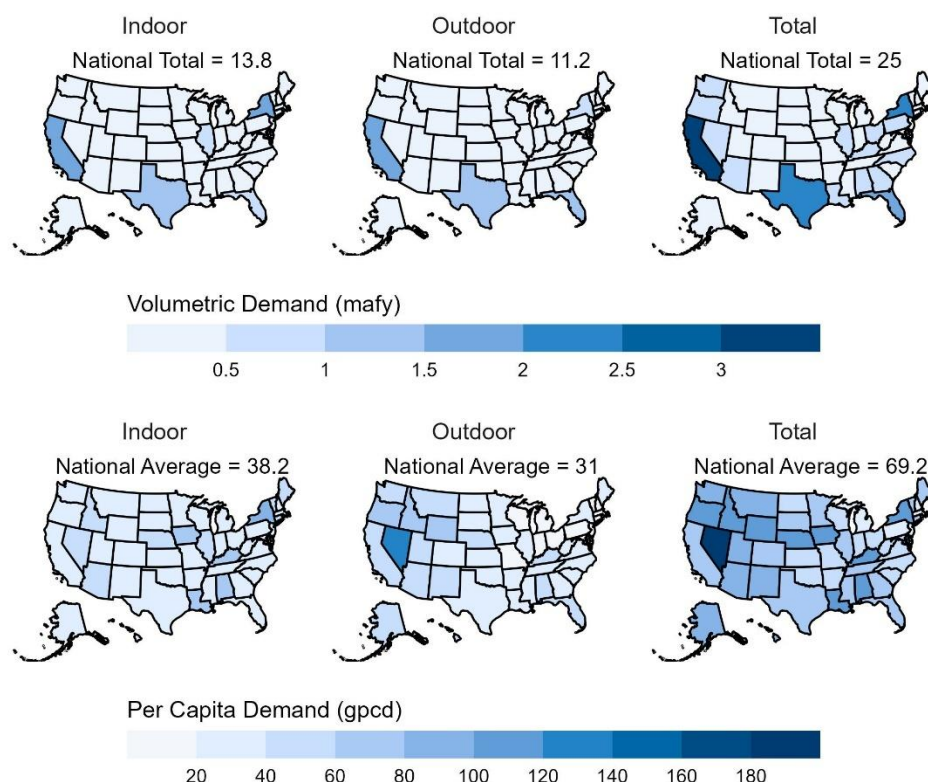


Figure A1. State-Level Baseline Residential Water Demand Estimates as Volumetric Demand (top) and Per Capita Demand (bottom), by Water Use Setting.

There is a significant difference in the variability of state-level GPCD estimates depending on water use setting (i.e., indoor vs. outdoor vs. total). Indoor water use is less variable across the country than outdoor water use, which could point to commonality in drivers of high indoor water use and more location-specific drivers of high outdoor water use across states. Depending on the existing levels of indoor water use efficiency, which we explore further in this section, this trend suggests that federal-level or multi-state strategies using a broader approach could be suitable for indoor efficiency savings in the Residential sector. However, efforts to secure outdoor efficiency savings are more likely to require strategies that account for state- and/or local-level context and variability in drivers of outdoor water demand (e.g., landscape characteristics, cultural and behavioral norms of outdoor water use, local climate and weather conditions).

Commercial, Industrial, Institutional

Volumetric Demand (million acre-feet per year)

Water Use Intensity (gallons per square foot per year)

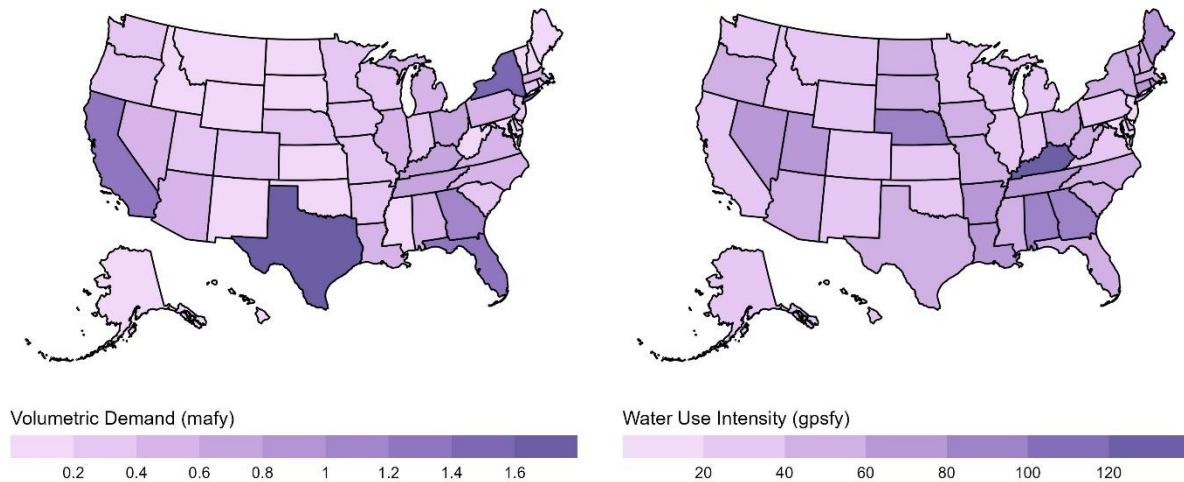


Figure A2. State-Level Estimates of Baseline CII Water Demands, as Volumetric Demand (left) and Water Use Intensity (right).

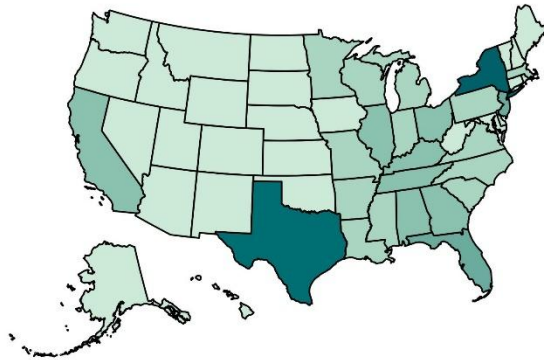
Utility Water Losses

Overall, we estimate the current-day water utility water loss demands to be 11.5 mafy (10.3 bgd, 33.0 gpcd). This volume represents the estimate of total leakage and corresponds to an estimated unavoidable leakage of 2.16 mafy and national average ILI of 4.89. At the state-level, illustrated in Figure A3, we observe higher per capita leakage estimates in the eastern half of the United States than in the western half as well as the same trend in highest water demand volumes in the most populous state that we observed for the other sectors in this analysis.

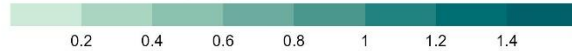
In general, the average age of water distribution infrastructure is older in the eastern half of the country than in the western half, in part due to historical patterns of development and population growth following the same trend. As infrastructure ages and becomes more fragile, a utility would expect higher real losses due to increasing frequency of failure, unless the utility was proactively identifying and replacing at-risk infrastructure before failure could occur. This pattern would suggest agreement with spatial patterns in per capita leakage observed in this study, though the previously discussed data limitations increase the uncertainty and should be considered when interpreting these estimates for states without directly observed data. Still, this spatial pattern persists consistently across

states with utility water loss demands estimated from observed data, lending confidence in applying this trend to the entire United States.

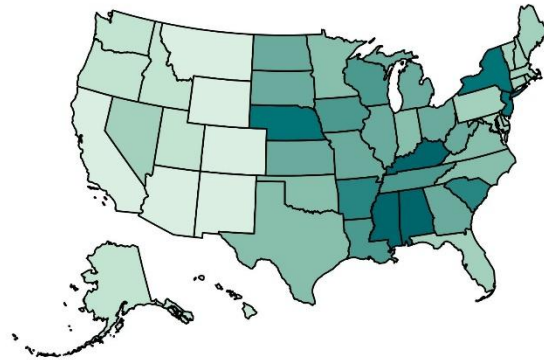
Volumetric Demand (million acre-feet per year)



Volumetric Demand (maf)



Per Capita Demand (gallons per capita per day)



Per Capita Demand (gpcd)



Figure A3. State-Level Estimates of Baseline Utility Loss Water Demands, as Volumetric Demand (left) and Per Capita Demands (right).

Water Efficiency Potential

Municipal & Industrial

Table A2. State-Level Summary of Municipal & Industrial Efficiency Potential, As Water Savings by Efficiency Scenario, In Alphabetical Order of State Abbreviation.

		Current-Day		Basic Efficiency		High Efficiency		Leading-Edge Efficiency
State	Population (millions)	Demand (mafyr)	Savings (mafyr)	Reduction from Current-Day (%)	Savings (mafyr)	Reduction from Current-Day (%)	Savings (mafyr)	Reduction from Current-Day (%)
NY	19.4	5.23	2.48	47.4	3.23	61.6	3.97	75.8
FL	21.1	3.68	1.03	28.1	1.72	46.6	2.42	65.7
CA	38.5	5.11	0.947	18.5	1.81	35.4	2.84	55.6
TX	28.6	5.24	0.855	16.3	1.92	36.7	2.94	56.1
AL	4.89	1.68	0.771	45.8	1.02	60.9	1.26	74.7
NJ	9.08	1.38	0.635	45.9	0.784	56.7	0.997	72.0
KY	4.39	1.71	0.558	32.6	0.808	47.2	1.08	63.3
IL	12.5	1.95	0.508	26.0	0.861	44.0	1.21	62.1
GA	10.5	2.22	0.447	20.1	0.829	37.3	1.29	58.1
LA	4.52	1.22	0.424	34.9	0.620	51.0	0.801	65.9
OH	11.5	1.85	0.343	18.5	0.636	34.3	1.01	54.7
TN	6.78	1.57	0.337	21.5	0.638	40.7	0.994	63.4
WA	7.54	1.27	0.320	25.2	0.554	43.7	0.807	63.5
NC	10.2	1.43	0.316	22.1	0.584	40.9	0.889	62.2
IA	3.10	0.753	0.270	35.8	0.365	48.5	0.472	62.7
SC	5.00	0.877	0.270	30.8	0.395	45.0	0.530	60.5
MI	9.82	1.19	0.255	21.5	0.440	37.1	0.679	57.2
MO	6.01	1.01	0.239	23.7	0.421	41.8	0.615	61.1
MS	2.86	0.694	0.236	34.0	0.348	50.1	0.459	66.2
NV	3.07	1.23	0.236	19.3	0.430	35.0	0.634	51.7
WI	5.75	0.925	0.191	20.6	0.329	35.6	0.522	56.5
OR	4.13	0.892	0.187	21.0	0.306	34.3	0.463	51.9
IN	6.61	0.932	0.183	19.7	0.332	35.7	0.525	56.3
VA	8.39	1.15	0.182	15.8	0.392	34.0	0.625	54.3
PA	12.6	1.28	0.175	13.6	0.410	31.9	0.711	55.4
AR	2.94	0.699	0.165	23.6	0.289	41.4	0.409	58.5
NE	1.91	0.570	0.139	24.3	0.220	38.7	0.303	53.3
MN	5.56	0.830	0.138	16.6	0.270	32.6	0.422	50.8
CT	3.50	0.625	0.121	19.3	0.225	36.0	0.349	55.8
AZ	7.01	1.27	0.119	9.36	0.329	25.9	0.555	43.6

MA	6.74	0.877	0.112	12.8	0.214	24.4	0.406	46.3
UT	3.23	0.728	0.107	14.7	0.236	32.4	0.394	54.2
KS	2.85	0.448	0.0856	19.1	0.159	35.4	0.240	53.5
HI	1.41	0.251	0.0700	27.9	0.117	46.5	0.165	65.8
CO	5.65	0.763	0.0665	8.72	0.168	22.1	0.325	42.6
WV	1.74	0.283	0.0625	22.1	0.103	36.4	0.161	57.0
ME	1.33	0.258	0.0598	23.2	0.0948	36.8	0.139	54.0
MD	6.03	0.552	0.0565	10.2	0.175	31.7	0.299	54.3
ID	1.80	0.345	0.0497	14.4	0.0921	26.7	0.149	43.1
OK	3.85	0.585	0.0494	8.44	0.168	28.8	0.284	48.5
RI	1.05	0.194	0.0360	18.5	0.0708	36.5	0.106	54.6
AK	0.706	0.123	0.0350	28.4	0.0501	40.7	0.0749	60.8
NM	2.07	0.307	0.0291	9.48	0.0590	19.2	0.0993	32.4
DC	0.641	0.0872	0.0225	25.8	0.0394	45.2	0.0578	66.3
SD	0.857	0.155	0.0215	13.9	0.0459	29.7	0.0689	44.6
NH	1.34	0.168	0.0214	12.8	0.0483	28.7	0.0850	50.6
VT	0.619	0.110	0.0204	18.6	0.0362	32.9	0.0657	59.8
ND	0.749	0.135	0.0198	14.7	0.0387	28.7	0.0769	57.1
DE	0.972	0.102	0.0165	16.2	0.0321	31.4	0.0585	57.2
MT	1.06	0.161	0.0129	8.05	0.0311	19.3	0.0602	37.5
WY	0.564	0.109	0.0100	9.20	0.0212	19.4	0.0412	37.9

Table A3. State-Level Summary of Municipal & Industrial Efficiency Potential, As Per Capita Savings by Efficiency Scenario, In Alphabetical Order of State Abbreviation.

		Current-Day		Basic Efficiency		High Efficiency		Leading-Edge Efficiency
State	Population (millions)	Demand (gpcd)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)
AK	0.706	158	44.4	28.1	64.2	40.7	96.1	60.9
AL	4.89	287	130	45.4	173	60.2	213	74.2
AR	2.94	210	49.0	23.4	86.1	41.1	122	58.3
AZ	7.01	162	15.2	9.34	41.9	25.8	70.7	43.6
CA	38.5	118	22.0	18.6	41.9	35.5	65.7	55.6
CO	5.65	120	10.5	8.79	26.6	22.2	51.3	42.9
CT	3.50	165	31.1	18.8	59.4	35.9	92.4	55.9
DC	0.641	121	31.1	25.7	54.5	45.1	80.0	66.2
DE	0.972	93.2	15.0	16.0	29.1	31.3	53.3	57.1
FL	21.1	156	43.8	28.1	72.7	46.6	102	65.7
GA	10.5	190	38.4	20.2	71.2	37.4	111	58.2

HI	1.41	158	44.2	28.0	73.4	46.5	104	65.8
IA	3.10	221	79.8	36.0	108	48.9	140	63.0
ID	1.80	176	24.6	14.0	45.6	25.9	74.6	42.4
IL	12.5	142	37.0	26.1	62.6	44.2	88.1	62.3
IN	6.61	135	28.2	20.9	50.1	37.1	77.6	57.4
KS	2.85	141	26.9	19.1	49.9	35.4	75.3	53.6
KY	4.39	346	113	32.5	163	47.1	219	63.2
LA	4.52	234	81.9	34.9	119	50.8	154	65.7
MA	6.74	106	13.3	12.4	25.8	24.2	49.4	46.4
MD	6.03	84.2	8.37	9.93	26.9	31.9	45.9	54.5
ME	1.33	186	41.8	22.4	69.9	37.5	102	54.9
MI	9.82	118	27.1	22.9	46.5	39.3	69.7	58.9
MN	5.56	141	24.5	17.4	47.7	33.9	73.2	52.1
MO	6.01	155	37.7	24.4	65.8	42.5	95.4	61.6
MS	2.86	209	69.4	33.3	103	49.3	137	65.6
MT	1.06	138	10.9	7.91	26.2	19.0	50.7	36.8
NC	10.2	130	28.8	22.2	53.7	41.4	81.3	62.6
ND	0.749	164	25.0	15.2	48.4	29.5	94.4	57.5
NE	1.91	278	72.1	26.0	112	40.3	152	54.7
NH	1.34	121	15.0	12.4	36.0	29.9	62.3	51.7
NJ	9.08	138	64.0	46.3	78.8	57.1	99.9	72.3
NM	2.07	133	12.5	9.45	25.4	19.2	42.8	32.3
NV	3.07	356	68.6	19.3	125	35.0	184	51.7
NY	19.4	246	117	47.7	152	61.9	187	76.0
OH	11.5	148	28.1	19.0	51.9	35.1	81.8	55.3
OK	3.85	138	11.5	8.36	40.1	29.0	67.3	48.8
OR	4.13	196	41.1	21.0	67.7	34.6	102	52.2
PA	12.6	93.4	12.9	13.9	30.3	32.4	52.1	55.8
RI	1.05	165	30.6	18.5	60.3	36.5	90.2	54.6
SC	5.00	166	53.5	32.3	77.2	46.6	102	61.8
SD	0.857	167	25.0	14.9	51.9	31.0	76.8	45.9
TN	6.78	202	42.7	21.2	81.4	40.4	127	63.2
TX	28.6	162	26.5	16.3	59.3	36.6	90.7	56.0
UT	3.23	201	29.6	14.7	65.2	32.5	109	54.2
VA	8.39	127	20.1	15.8	44.0	34.6	69.8	54.8
VT	0.619	166	30.0	18.1	55.3	33.4	99.5	60.0
WA	7.54	150	37.8	25.3	65.3	43.6	95.1	63.5
WI	5.75	158	36.5	23.1	61.0	38.6	92.8	58.7
WV	1.74	151	34.5	22.8	56.6	37.5	87.3	57.8
WY	0.564	174	15.9	9.13	33.5	19.3	65.4	37.6

Residential

In terms of percentage reduction from current-day demands, only Alabama, New York, Louisiana, and Kentucky remain among the top states with the largest efficiency potential listed in Table A5. The additional states not appearing in Table A4, (Alaska, Maine, Iowa, Vermont, Hawaii, Connecticut, and Rhode Island), are all among the bottom half of states in terms of current-day water demand volume (except for Iowa, which is ranked 21st) and are positioned between the tenth highest (Iowa) and 39th highest (Vermont) volumetric savings in the Basic scenarios. This relative disparity between their positions in terms of current-day water demand and Basic scenario demand reductions highlights the opportunity for these states to realize meaningful demand reductions despite relatively small current-day water demands.

Table A4. Top 15 States with the Largest Residential Efficiency Potential, In Descending Order of Water Savings in the Basic Efficiency Scenario.

	Current-Day		Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
State	Population (millions)	Demand (maf)	Savings (maf)	Reduction from Current-Day (%)	Savings (maf)	Reduction from Current-Day (%)	Savings (maf)	Reduction from Current-Day (%)
NY	19.4	2.30	1.34	58.3	1.54	66.9	1.77	76.9
CA	38.5	3.36	0.706	21.0	1.24	36.8	1.86	55.3
FL	21.1	1.80	0.601	33.4	0.840	46.7	1.15	63.7
AL	4.89	0.583	0.393	67.4	0.437	75.0	0.491	84.2
LA	4.52	0.516	0.258	50.0	0.295	57.2	0.344	66.7
IL	12.5	0.891	0.257	28.8	0.366	41.1	0.505	56.7
KY	4.39	0.539	0.247	45.7	0.284	52.6	0.335	62.1
WA	7.54	0.723	0.244	33.7	0.355	49.1	0.469	64.8
TX	28.6	2.25	0.226	10.0	0.550	24.4	0.969	43.0
IA	3.10	0.391	0.173	44.3	0.202	51.8	0.237	60.7
NC	10.2	0.565	0.162	28.8	0.231	40.9	0.348	61.7
GA	10.5	0.720	0.150	20.8	0.214	29.7	0.336	46.7
TN	6.78	0.491	0.142	28.8	0.222	45.2	0.314	63.9
NV	3.07	0.645	0.123	19.1	0.188	29.1	0.263	40.8
OR	4.13	0.503	0.112	22.2	0.152	30.2	0.213	42.3
All Other States	144	8.74	1.34	0.153	2.20	0.252	3.75	0.430

Table A5. Top 15 States with the Largest Percentage Reduction from Residential Baseline Demands, In Descending Order Water Savings in the Basic Efficiency Scenario.

	Current-Day		Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
State	Population (millions)	Demand (maf)	Savings (maf)	Reduction from Current-Day (%)	Savings (maf)	Reduction from Current-Day (%)	Savings (maf)	Reduction from Current-Day (%)
AL	4.89	0.583	0.393	67.4	0.437	75.0	0.491	84.2
NY	19.4	2.30	1.34	58.3	1.54	66.9	1.77	76.9
LA	4.52	0.516	0.258	50.0	0.295	57.2	0.344	66.7
KY	4.39	0.539	0.247	45.7	0.284	52.6	0.335	62.1
AK	0.706	0.0700	0.0315	45.0	0.0380	54.3	0.0463	66.2
ME	1.33	0.108	0.0480	44.5	0.0582	53.9	0.0717	66.4
IA	3.10	0.391	0.173	44.3	0.202	51.8	0.237	60.7
VT	0.619	0.0426	0.0177	41.6	0.0225	52.8	0.0288	67.6
HI	1.41	0.140	0.0525	37.5	0.0716	51.2	0.0913	65.2
CT	3.50	0.240	0.0829	34.5	0.110	45.7	0.146	60.6
RI	1.05	0.0721	0.0249	34.5	0.0330	45.7	0.0437	60.6
WA	7.54	0.723	0.244	33.7	0.355	49.1	0.469	64.8
FL	21.1	1.80	0.601	33.4	0.840	46.7	1.15	63.7
IL	12.5	0.891	0.257	28.8	0.366	41.1	0.505	56.7
NC	10.2	0.565	0.162	28.8	0.231	40.9	0.348	61.7
TN	6.78	0.491	0.142	28.8	0.222	45.2	0.314	63.9
All Other States	144	8.74	1.34	0.153	2.20	0.252	3.75	0.430

Table A6. State-Level Summary of Total Residential Efficiency Potential, As Water Savings by Efficiency Scenario, In Alphabetical Order.

		Current-Day		Basic Efficiency		High Efficiency		Leading-Edge Efficiency
State	Population (millions)	Demand (maf)	Savings (maf)	Reduction from Current-Day (%)	Savings (maf)	Reduction from Current-Day (%)	Savings (maf)	Reduction from Current-Day (%)
AK	0.706	0.0700	0.0315	45.0	0.0380	54.3	0.0463	66.2
AL	4.89	0.583	0.393	67.4	0.437	75.0	0.491	84.2
AR	2.94	0.185	0.0195	10.6	0.0394	21.3	0.0691	37.3
AZ	7.01	0.744	0.0668	8.98	0.165	22.2	0.295	39.6
CA	38.5	3.36	0.706	21.0	1.24	36.8	1.86	55.3
CO	5.65	0.400	0.0146	3.65	0.0503	12.6	0.125	31.3
CT	3.50	0.240	0.0829	34.5	0.110	45.7	0.146	60.6
DC	0.641	0.0283	0.00348	12.3	0.00637	22.5	0.0131	46.4

DE	0.972	0.0402	0.00380	9.46	0.00790	19.7	0.0183	45.5
FL	21.1	1.80	0.601	33.4	0.840	46.7	1.15	63.7
GA	10.5	0.720	0.150	20.8	0.214	29.7	0.336	46.7
HI	1.41	0.140	0.0525	37.5	0.0716	51.2	0.0913	65.2
IA	3.10	0.391	0.173	44.3	0.202	51.8	0.237	60.7
ID	1.80	0.236	0.0408	17.3	0.0548	23.3	0.0795	33.7
IL	12.5	0.891	0.257	28.8	0.366	41.1	0.505	56.7
IN	6.61	0.406	0.0865	21.3	0.138	33.9	0.206	50.8
KS	2.85	0.162	0.00431	2.66	0.0151	9.35	0.0433	26.8
KY	4.39	0.539	0.247	45.7	0.284	52.6	0.335	62.1
LA	4.52	0.516	0.258	50.0	0.295	57.2	0.344	66.7
MA	6.74	0.233	0.0336	14.4	0.0366	15.7	0.0857	36.8
MD	6.03	0.306	0.0488	15.9	0.0853	27.8	0.150	49.0
ME	1.33	0.108	0.0480	44.5	0.0582	53.9	0.0717	66.4
MI	9.82	0.372	0.0707	19.0	0.0774	20.8	0.153	41.2
MN	5.56	0.385	0.0477	12.4	0.0813	21.1	0.137	35.5
MO	6.01	0.357	0.0803	22.5	0.124	34.6	0.192	53.8
MS	2.86	0.207	0.0473	22.8	0.0692	33.4	0.0995	48.0
MT	1.06	0.106	0.00578	5.45	0.0144	13.5	0.0255	24.1
NC	10.2	0.565	0.162	28.8	0.231	40.9	0.348	61.7
ND	0.749	0.0389	0.00222	5.71	0.00465	11.9	0.0119	30.5
NE	1.91	0.222	0.0319	14.4	0.0492	22.2	0.0739	33.3
NH	1.34	0.0596	0.0113	18.9	0.0166	27.8	0.0289	48.5
NJ	9.08	0.375	0.0383	10.2	0.0765	20.4	0.173	46.1
NM	2.07	0.191	0.00843	4.42	0.0209	11.0	0.0392	20.6
NV	3.07	0.645	0.123	19.1	0.188	29.1	0.263	40.8
NY	19.4	2.30	1.34	58.3	1.54	66.9	1.77	76.9
OH	11.5	0.572	0.0865	15.1	0.137	24.0	0.253	44.3
OK	3.85	0.242	0.00647	2.67	0.0325	13.4	0.0713	29.5
OR	4.13	0.503	0.112	22.2	0.152	30.2	0.213	42.3
PA	12.6	0.545	0.0632	11.6	0.128	23.5	0.262	48.1
RI	1.05	0.0721	0.0249	34.5	0.0330	45.7	0.0437	60.6
SC	5.00	0.296	0.0412	13.9	0.0669	22.6	0.119	40.2
SD	0.857	0.0604	0.00121	1.99	0.00459	7.60	0.0129	21.4
TN	6.78	0.491	0.142	28.8	0.222	45.2	0.314	63.9
TX	28.6	2.25	0.226	10.0	0.550	24.4	0.969	43.0
UT	3.23	0.321	0.0421	13.1	0.0864	26.9	0.135	41.9
VA	8.39	0.469	0.0813	17.3	0.124	26.4	0.212	45.2
VT	0.619	0.0426	0.0177	41.6	0.0225	52.8	0.0288	67.6
WA	7.54	0.723	0.244	33.7	0.355	49.1	0.469	64.8
WI	5.75	0.333	0.0611	18.3	0.108	32.3	0.171	51.4
WV	1.74	0.108	0.0259	24.0	0.0365	33.9	0.0551	51.1

WY	0.564	0.0657	0.00581	8.84	0.0102	15.5	0.0159	24.2
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Table A7. State-Level Summary of Total Residential Efficiency Potential, As Per Capita Savings by Efficiency Scenario, In Alphabetical Order.

State	Current-Day	Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
	Demand (gpcd)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)
AK	88.5	39.8	45.0	48.0	54.3	58.6	66.2
AL	106	71.8	67.4	79.8	75.0	89.7	84.2
AR	56.2	5.93	10.6	12.0	21.3	21.0	37.3
AZ	94.7	8.50	8.98	21.0	22.2	37.5	39.6
CA	78.0	16.4	21.0	28.7	36.8	43.2	55.3
CO	63.2	2.31	3.65	7.96	12.6	19.8	31.3
CT	61.3	21.2	34.5	28.1	45.7	37.2	60.6
DC	39.4	4.85	12.3	8.87	22.5	18.3	46.4
DE	36.9	3.49	9.46	7.25	19.7	16.8	45.5
FL	76.0	25.4	33.4	35.5	46.7	48.4	63.7
GA	61.5	12.8	20.8	18.2	29.7	28.7	46.7
HI	88.5	33.2	37.5	45.3	51.2	57.7	65.2
IA	113	49.9	44.3	58.3	51.8	68.4	60.7
ID	117	20.2	17.3	27.1	23.3	39.3	33.7
IL	63.8	18.4	28.8	26.2	41.1	36.1	56.7
IN	54.8	11.7	21.3	18.6	33.9	27.8	50.8
KS	50.7	1.35	2.66	4.74	9.35	13.6	26.8
KY	110	50.1	45.7	57.7	52.6	68.1	62.1
LA	102	51.0	50.0	58.3	57.2	68.0	66.7
MA	30.8	4.45	14.4	4.85	15.7	11.3	36.8
MD	45.4	7.23	15.9	12.6	27.8	22.2	49.0
ME	72.5	32.3	44.5	39.1	53.9	48.2	66.4
MI	33.8	6.42	19.0	7.03	20.8	13.9	41.2
MN	61.9	7.66	12.4	13.1	21.1	22.0	35.5
MO	53.1	11.9	22.5	18.4	34.6	28.6	53.8
MS	64.7	14.8	22.8	21.6	33.4	31.1	48.0
MT	89.2	4.86	5.45	12.1	13.5	21.5	24.1
NC	49.5	14.2	28.8	20.3	40.9	30.6	61.7
ND	46.4	2.65	5.71	5.54	11.9	14.1	30.5
NE	103	14.9	14.4	23.0	22.2	34.5	33.3
NH	39.7	7.51	18.9	11.0	27.8	19.3	48.5
NJ	36.9	3.76	10.2	7.52	20.4	17.0	46.1
NM	82.1	3.63	4.42	8.99	11.0	16.9	20.6

NV	188	35.8	19.1	54.6	29.1	76.6	40.8
NY	106	61.7	58.3	70.9	66.9	81.4	76.9
OH	44.4	6.72	15.1	10.7	24.0	19.7	44.3
OK	56.0	1.50	2.67	7.52	13.4	16.5	29.5
OR	109	24.1	22.2	32.7	30.2	46.0	42.3
PA	38.7	4.49	11.6	9.10	23.5	18.6	48.1
RI	61.3	21.2	34.5	28.1	45.7	37.2	60.6
SC	52.8	7.37	13.9	12.0	22.6	21.2	40.2
SD	62.9	1.26	1.99	4.78	7.60	13.5	21.4
TN	64.7	18.6	28.8	29.3	45.2	41.3	63.9
TX	70.2	7.05	10.0	17.2	24.4	30.2	43.0
UT	88.8	11.6	13.1	23.9	26.9	37.2	41.9
VA	49.9	8.65	17.3	13.2	26.4	22.6	45.2
VT	61.3	25.5	41.6	32.4	52.8	41.5	67.6
WA	85.6	28.9	33.7	42.0	49.1	55.5	64.8
WI	51.7	9.49	18.3	16.7	32.3	26.6	51.4
WV	55.3	13.3	24.0	18.7	33.9	28.3	51.1
WY	104	9.19	8.84	16.1	15.5	25.1	24.2

Percentage Reduction from Baseline Demand

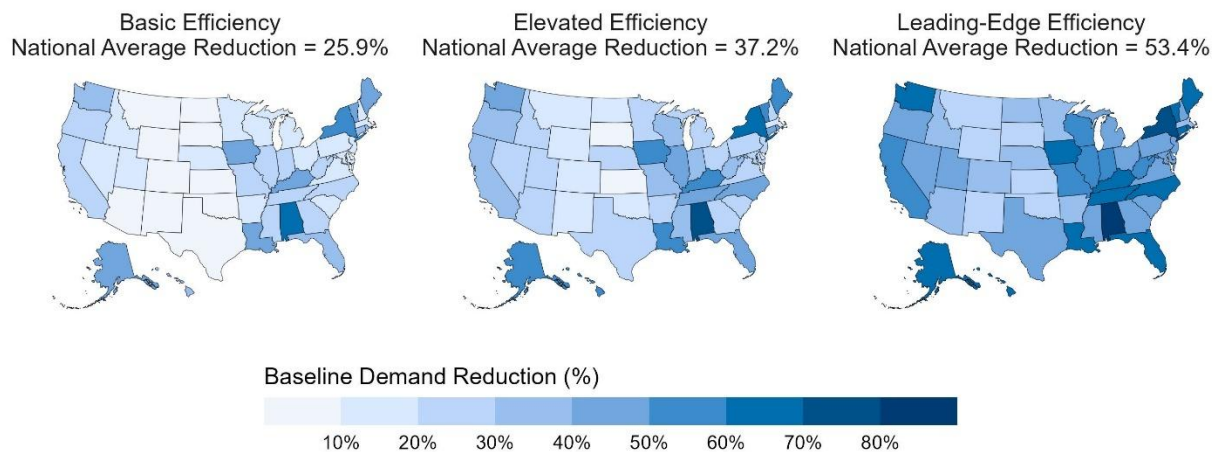


Figure A4. Total Residential (Indoor and Outdoor) Efficiency Potential, As State-Level Percent Reduction from Current-Day Demand.

Indoor

Table A8. Residential Indoor Efficiency Potential, By End-Use and Efficiency Scenario, In Descending Order of National Water Savings in the Basic Efficiency Scenario.

	Current-Day	Basic Efficiency	High Efficiency	Leading-Edge Efficiency
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End-Use	Demand (mafy)	Savings (mafy)	Reduction from Current-Day (%)	Savings (mafy)	Reduction from Current-Day (%)	Savings (mafy)	Reduction from Current-Day (%)
Toilets	4.62	1.31	28.3	1.94	41.9	2.97	64.1
Showerhead	4.56	0.824	18.1	1.38	30.2	2.95	64.7
Faucets	1.70	0.423	24.9	0.792	46.6	1.21	71.4
Low-Flow Leaks	1.13	0.270	23.9	0.326	28.9	0.398	35.2
Clothes Washer	1.61	0.235	14.6	0.596	37.1	0.767	47.7
Dishwasher	0.185	0.0191	10.3	0.0495	26.7	0.0643	34.8
Indoor Total	13.8	3.08	22.3	5.08	36.8	8.36	60.5

Table A9. Residential Indoor Efficiency Potential, By End-Use and Efficiency Scenario, In Descending Order National Per Capita Savings in the Basic Efficiency Scenario.

	Current-Day	Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
End-Use	Demand (gpcd)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)
Toilets	12.8	3.61	28.3	5.36	41.9	8.20	64.1
Showerhead	12.6	2.28	18.1	3.81	30.2	8.15	64.7
Faucets	4.70	1.17	24.9	2.19	46.6	3.35	71.4
Low-Flow Leaks	3.13	0.747	23.9	0.902	28.9	1.10	35.2
Clothes Washer	4.45	0.651	14.6	1.65	37.1	2.12	47.7
Dishwasher	0.511	0.0527	10.3	0.137	26.7	0.178	34.8
Indoor Total	38.2	8.51	22.3	14.0	36.8	23.1	60.5

Table A10. State-Level Summary of Residential Indoor Efficiency Potential, as Water Savings by Efficiency Scenario, In Alphabetical Order.

		Current-Day		Basic Efficiency		High Efficiency		Leading-Edge Efficiency
State	Population (millions)	Demand (mafy)	Savings (mafy)	Reduction from Current-Day (%)	Savings (mafy)	Reduction from Current-Day (%)	Savings (mafy)	Reduction from Current-Day (%)
AK	0.706	0.0700	0.0315	45.0	0.0380	54.3	0.0463	66.2
AL	4.89	0.583	0.393	67.4	0.437	75.0	0.491	84.2

AR	2.94	0.185	0.0195	10.6	0.0394	21.3	0.0691	37.3
AZ	7.01	0.744	0.0668	8.98	0.165	22.2	0.295	39.6
CA	38.5	3.36	0.706	21.0	1.24	36.8	1.86	55.3
CO	5.65	0.400	0.0146	3.65	0.0503	12.6	0.125	31.3
CT	3.50	0.240	0.0829	34.5	0.110	45.7	0.146	60.6
DC	0.641	0.0283	0.00348	12.3	0.00637	22.5	0.0131	46.4
DE	0.972	0.0402	0.00380	9.46	0.00790	19.7	0.0183	45.5
FL	21.1	1.80	0.601	33.4	0.840	46.7	1.15	63.7
GA	10.5	0.720	0.150	20.8	0.214	29.7	0.336	46.7
HI	1.41	0.140	0.0525	37.5	0.0716	51.2	0.0913	65.2
IA	3.10	0.391	0.173	44.3	0.202	51.8	0.237	60.7
ID	1.80	0.236	0.0408	17.3	0.0548	23.3	0.0795	33.7
IL	12.5	0.891	0.257	28.8	0.366	41.1	0.505	56.7
IN	6.61	0.406	0.0865	21.3	0.138	33.9	0.206	50.8
KS	2.85	0.162	0.00431	2.66	0.0151	9.35	0.0433	26.8
KY	4.39	0.539	0.247	45.7	0.284	52.6	0.335	62.1
LA	4.52	0.516	0.258	50.0	0.295	57.2	0.344	66.7
MA	6.74	0.233	0.0336	14.4	0.0366	15.7	0.0857	36.8
MD	6.03	0.306	0.0488	15.9	0.0853	27.8	0.150	49.0
ME	1.33	0.108	0.0480	44.5	0.0582	53.9	0.0717	66.4
MI	9.82	0.372	0.0707	19.0	0.0774	20.8	0.153	41.2
MN	5.56	0.385	0.0477	12.4	0.0813	21.1	0.137	35.5
MO	6.01	0.357	0.0803	22.5	0.124	34.6	0.192	53.8
MS	2.86	0.207	0.0473	22.8	0.0692	33.4	0.0995	48.0
MT	1.06	0.106	0.00578	5.45	0.0144	13.5	0.0255	24.1
NC	10.2	0.565	0.162	28.8	0.231	40.9	0.348	61.7
ND	0.749	0.0389	0.00222	5.71	0.00465	11.9	0.0119	30.5
NE	1.91	0.222	0.0319	14.4	0.0492	22.2	0.0739	33.3
NH	1.34	0.0596	0.0113	18.9	0.0166	27.8	0.0289	48.5
NJ	9.08	0.375	0.0383	10.2	0.0765	20.4	0.173	46.1
NM	2.07	0.191	0.00843	4.42	0.0209	11.0	0.0392	20.6
NV	3.07	0.645	0.123	19.1	0.188	29.1	0.263	40.8
NY	19.4	2.30	1.34	58.3	1.54	66.9	1.77	76.9
OH	11.5	0.572	0.0865	15.1	0.137	24.0	0.253	44.3
OK	3.85	0.242	0.00647	2.67	0.0325	13.4	0.0713	29.5
OR	4.13	0.503	0.112	22.2	0.152	30.2	0.213	42.3
PA	12.6	0.545	0.0632	11.6	0.128	23.5	0.262	48.1
RI	1.05	0.0721	0.0249	34.5	0.0330	45.7	0.0437	60.6
SC	5.00	0.296	0.0412	13.9	0.0669	22.6	0.119	40.2
SD	0.857	0.0604	0.00121	1.99	0.00459	7.60	0.0129	21.4
TN	6.78	0.491	0.142	28.8	0.222	45.2	0.314	63.9
TX	28.6	2.25	0.226	10.0	0.550	24.4	0.969	43.0

UT	3.23	0.321	0.0421	13.1	0.0864	26.9	0.135	41.9
VA	8.39	0.469	0.0813	17.3	0.124	26.4	0.212	45.2
VT	0.619	0.0426	0.0177	41.6	0.0225	52.8	0.0288	67.6
WA	7.54	0.723	0.244	33.7	0.355	49.1	0.469	64.8
WI	5.75	0.333	0.0611	18.3	0.108	32.3	0.171	51.4
WV	1.74	0.108	0.0259	24.0	0.0365	33.9	0.0551	51.1
WY	0.564	0.0657	0.00581	8.84	0.0102	15.5	0.0159	24.2

Table A11. State-Level Summary of Residential Indoor Efficiency Potential, as Per Capita Savings by Efficiency Scenario, In Alphabetical Order.

	Current-Day	Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
State	Demand (maf/y)	Savings (maf/y)	Reduction from Current-Day (%)	Savings (maf/y)	Reduction from Current-Day (%)	Savings (maf/y)	Reduction from Current-Day (%)
AK	0.0275	0.00284	10.3	0.00813	29.6	0.0152	55.3
AL	0.353	0.175	49.6	0.215	61.0	0.267	75.7
AR	0.107	0.00499	4.67	0.0249	23.3	0.0545	51.1
AZ	0.329	0.0533	16.2	0.115	34.9	0.199	60.4
CA	1.51	0.194	12.9	0.469	31.2	0.857	57.0
CO	0.185	0.0124	6.68	0.0386	20.9	0.0955	51.6
CT	0.166	0.0457	27.6	0.0727	43.9	0.108	65.4
DC	0.0199	0.000519	2.61	0.00318	16.0	0.00966	48.6
DE	0.0314	0.000845	2.69	0.00494	15.7	0.0152	48.5
FL	0.785	0.0512	6.53	0.181	23.1	0.406	51.7
GA	0.363	0.0134	3.68	0.0666	18.3	0.177	48.8
HI	0.0550	0.00568	10.3	0.0163	29.6	0.0304	55.3
IA	0.254	0.147	58.0	0.172	67.8	0.203	80.2
ID	0.0896	0.0284	31.6	0.0423	47.2	0.0605	67.5
IL	0.582	0.153	26.3	0.253	43.5	0.379	65.2
IN	0.264	0.0389	14.7	0.0900	34.1	0.157	59.4
KS	0.0885	0.00335	3.78	0.0142	16.0	0.0423	47.8
KY	0.329	0.174	53.0	0.206	62.6	0.252	76.6
LA	0.347	0.181	52.4	0.218	62.9	0.265	76.6
MA	0.160	0	0	0.00301	1.88	0.0519	32.5
MD	0.206	0.0126	6.11	0.0465	22.6	0.108	52.7
ME	0.0745	0.0290	39.0	0.0392	52.6	0.0527	70.8
MI	0.243	0.00180	0.739	0.00843	3.47	0.0842	34.6
MN	0.199	0.0199	9.98	0.0535	26.9	0.109	54.7
MO	0.233	0.0384	16.4	0.0761	32.6	0.136	58.2
MS	0.119	0.0166	13.9	0.0384	32.3	0.0688	57.8

MT	0.0381	0.00267	7.02	0.0103	27.2	0.0209	55.0
NC	0.324	0.00500	1.54	0.0465	14.3	0.150	46.3
ND	0.0221	0.000492	2.22	0.00290	13.1	0.00995	45.0
NE	0.0973	0.0316	32.4	0.0470	48.2	0.0663	68.1
NH	0.0411	0.00163	3.97	0.00691	16.8	0.0193	46.9
NJ	0.293	0.00788	2.69	0.0461	15.7	0.142	48.5
NM	0.0657	0.00842	12.8	0.0205	31.2	0.0364	55.4
NV	0.196	0.0918	46.8	0.116	58.9	0.147	74.7
NY	1.80	1.11	61.9	1.27	70.7	1.48	82.1
OH	0.374	0.0201	5.37	0.0710	19.0	0.187	50.1
OK	0.139	0.00628	4.50	0.0323	23.2	0.0711	51.0
OR	0.149	0.0108	7.28	0.0366	24.6	0.0779	52.3
PA	0.425	0.0189	4.45	0.0834	19.6	0.217	51.0
RI	0.0498	0.0137	27.6	0.0218	43.9	0.0325	65.4
SC	0.170	0.00612	3.61	0.0318	18.7	0.0838	49.4
SD	0.0263	0.00109	4.15	0.00431	16.4	0.0124	47.2
TN	0.282	0.0393	13.9	0.0911	32.3	0.163	57.8
TX	1.22	0.197	16.1	0.409	33.5	0.707	57.9
UT	0.122	0.0290	23.8	0.0498	40.7	0.0772	63.2
VA	0.272	0.0122	4.48	0.0533	19.6	0.138	50.8
VT	0.0293	0.00810	27.6	0.0129	43.9	0.0192	65.4
WA	0.257	0.0138	5.36	0.0514	20.1	0.125	48.6
WI	0.216	0.0251	11.6	0.0647	29.9	0.123	56.8
WV	0.0576	0.00311	5.39	0.0123	21.4	0.0299	51.9
WY	0.0250	0.00581	23.3	0.0102	40.7	0.0159	63.5

At the state level, eight of the ten states with the highest residential indoor volumetric savings (Table 12 in report) also have the highest residential total savings (Table A10). In terms of percentage reduction from current-day demands, we find that New York, Iowa, Kentucky, Louisiana, and Alabama are ranked among the top ten states with both the highest total residential efficiency potential and indoor residential efficiency potential (Table A12). Of these states, only New York has adopted state-level fixture efficiency standards that are more efficient than current federal standards, emphasizing the role of state action in driving residential indoor efficiency through regulation.

Table A12. Top 15 States with Largest Residential Indoor Efficiency Potential, In Descending Order of State-Level Percentage Reduction from Current-Day Demand in the Basic Efficiency Scenario.

	Current-Day	Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
State	Demand (mafyr)	Savings (mafyr)	Reduction from Current-Day (%)	Savings (mafyr)	Reduction from Current-Day (%)	Savings (mafyr)	Reduction from Current-Day (%)

NY	1.80	1.11	61.9	1.27	70.7	1.48	82.1
IA	0.254	0.147	58.0	0.172	67.8	0.203	80.2
KY	0.329	0.174	53.0	0.206	62.6	0.252	76.6
LA	0.347	0.181	52.4	0.218	62.9	0.265	76.6
AL	0.353	0.175	49.6	0.215	61.0	0.267	75.7
NV	0.196	0.0918	46.8	0.116	58.9	0.147	74.7
ME	0.0745	0.0290	39.0	0.0392	52.6	0.0527	70.8
NE	0.0973	0.0316	32.4	0.0470	48.2	0.0663	68.1
ID	0.0896	0.0284	31.6	0.0423	47.2	0.0605	67.5
CT	0.166	0.0457	27.6	0.0727	43.9	0.108	65.4
RI	0.0498	0.0137	27.6	0.0218	43.9	0.0325	65.4
VT	0.0293	0.00810	27.6	0.0129	43.9	0.0192	65.4
IL	0.582	0.153	26.3	0.253	43.5	0.379	65.2
UT	0.122	0.0290	23.8	0.0498	40.7	0.0772	63.2
WY	0.0250	0.00581	23.3	0.0102	40.7	0.0159	63.5
All Other States	5.16	0.384	0.0744	1.12	0.218	2.63	0.510

Percentage Reduction from Baseline Demand

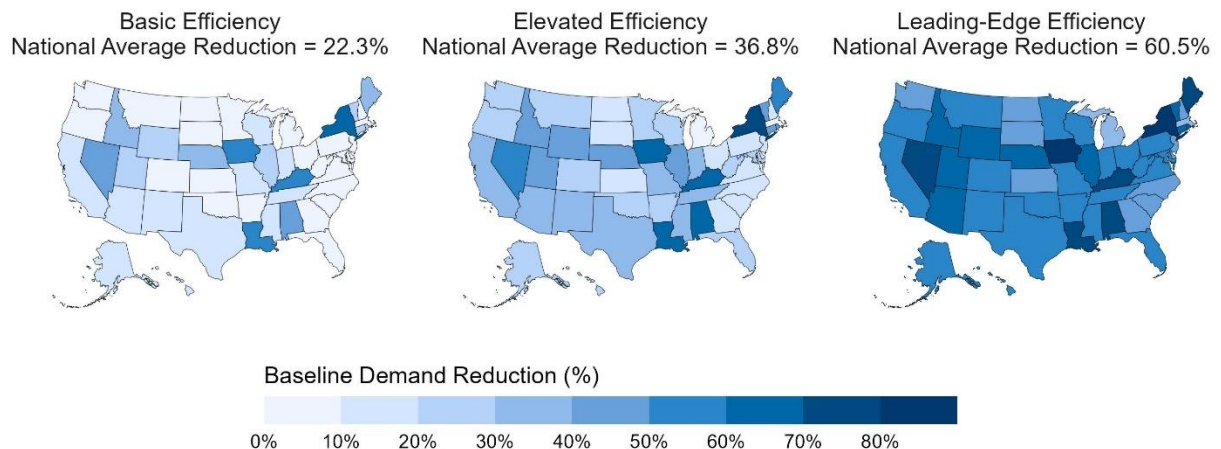


Figure A5. State-Level Residential Indoor Efficiency Potential, As Percentage Reduction from Baseline Demand.

Outdoor

Four of the ten states in Table 12 in the report are also one of the ten largest states in terms of per capita savings (Table A13). The outdoor volumetric savings in these states (Florida, Washington, Alabama, and North Carolina) are likely to be distributed more evenly across each state, whereas states where volumetric savings are concentrated among a few communities with high outdoor water use would have high volumetric savings but relatively

low per capita savings. The six other states or state-equivalent regions with the highest per capita savings (Alaska, Hawaii, Oregon, Louisiana, Kentucky, and Vermont) would benefit from additional investigation at the water provider-level to identify communities with disproportionately high outdoor water use compared to other areas in the state.

Table A13. Top 15 States with Largest Residential Outdoor Efficiency Savings Potential, In Descending Order of State-Level Per Capita Savings in the Basic Efficiency Scenario.

	Current-Day	Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
State	Demand (gpcd)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)
AL	42.0	39.8	94.8	40.5	96.5	40.9	97.4
AK	53.7	36.2	67.4	37.8	70.3	39.3	73.2
HI	53.7	29.6	55.1	35.0	65.1	38.5	71.6
WA	55.3	27.3	49.4	35.9	65.1	40.8	73.8
FL	42.9	23.2	54.1	27.8	64.9	31.3	73.0
OR	76.4	21.8	28.5	24.8	32.5	29.1	38.1
LA	33.5	15.2	45.2	15.3	45.6	15.6	46.5
KY	42.8	14.7	34.4	15.8	37.0	16.9	39.4
NC	21.1	13.8	65.6	16.2	76.8	17.4	82.6
VT	19.0	13.8	72.6	13.8	72.6	13.8	72.6
TN	27.5	13.5	48.9	17.3	62.8	19.8	72.1
ME	22.5	12.7	56.7	12.7	56.7	12.8	56.8
CA	43.1	11.9	27.6	17.8	41.3	23.3	54.0
WV	25.7	11.7	45.4	12.4	48.2	12.9	50.3
GA	30.5	11.6	38.2	12.6	41.1	13.6	44.6
All Other States	28.6	4.22	0.147	5.76	0.201	7.54	0.264

Table A14. Top 15 States with Largest Residential Outdoor Efficiency Potential, In Descending Order of Percent Reduction from Current-Day Demand in the Basic Efficiency Scenario.

	Current-Day	Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
State	Demand (mafyr)	Savings (mafyr)	Reduction from Current-Day (%)	Savings (mafyr)	Reduction from Current-Day (%)	Savings (mafyr)	Reduction from Current-Day (%)
AL	0.230	0.218	94.8	0.222	96.5	0.224	97.4
VT	0.0132	0.00959	72.6	0.00959	72.6	0.00959	72.6
AK	0.0425	0.0286	67.4	0.0299	70.3	0.0311	73.2

NC	0.240	0.157	65.6	0.184	76.8	0.198	82.6
ME	0.0334	0.0190	56.7	0.0190	56.7	0.0190	56.8
HI	0.0850	0.0468	55.1	0.0554	65.1	0.0609	71.6
FL	1.01	0.549	54.1	0.658	64.9	0.741	73.0
MI	0.129	0.0689	53.4	0.0690	53.5	0.0691	53.6
NH	0.0185	0.00965	52.0	0.00965	52.0	0.00965	52.0
CT	0.0745	0.0372	49.9	0.0372	49.9	0.0372	49.9
RI	0.0224	0.0112	49.9	0.0112	49.9	0.0112	49.9
WA	0.467	0.230	49.4	0.304	65.1	0.344	73.8
TN	0.209	0.102	48.9	0.131	62.8	0.151	72.1
MA	0.0733	0.0336	45.9	0.0336	45.9	0.0338	46.1
NY	0.500	0.227	45.4	0.268	53.5	0.291	58.2
WV	0.0501	0.0228	45.4	0.0242	48.2	0.0252	50.3
All Other States	4.77	0.703	0.147	0.961	0.201	1.26	0.264

Table A15. State-Level Summary of Residential Outdoor Efficiency Potential, As Water Savings by Efficiency Scenario, In Alphabetical Order.

	Current-Day	Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
State	Demand (mafyr)	Savings (mafyr)	Reduction from Current-Day (%)	Savings (mafyr)	Reduction from Current-Day (%)	Savings (mafyr)	Reduction from Current-Day (%)
AK	0.0425	0.0286	67.4	0.0299	70.3	0.0311	73.2
AL	0.230	0.218	94.8	0.222	96.5	0.224	97.4
AR	0.0783	0.0145	18.6	0.0145	18.6	0.0146	18.6
AZ	0.415	0.0135	3.25	0.0506	12.2	0.0962	23.1
CA	1.86	0.512	27.6	0.766	41.3	1.00	54.0
CO	0.215	0.00223	1.04	0.0118	5.47	0.0295	13.7
CT	0.0745	0.0372	49.9	0.0372	49.9	0.0372	49.9
DC	0.00844	0.00296	35.1	0.00319	37.8	0.00349	41.3
DE	0.00883	0.00296	33.5	0.00296	33.5	0.00305	34.6
FL	1.01	0.549	54.1	0.658	64.9	0.741	73.0
GA	0.357	0.136	38.2	0.147	41.1	0.159	44.6
HI	0.0850	0.0468	55.1	0.0554	65.1	0.0609	71.6
IA	0.137	0.0258	18.8	0.0302	22.1	0.0338	24.7
ID	0.146	0.0125	8.53	0.0125	8.58	0.0190	13.0
IL	0.309	0.103	33.5	0.113	36.5	0.125	40.5
IN	0.142	0.0476	33.6	0.0476	33.6	0.0493	34.7
KS	0.0731	0.000960	1.31	0.000960	1.31	0.000960	1.31

KY	0.211	0.0723	34.4	0.0780	37.0	0.0830	39.4
LA	0.170	0.0768	45.2	0.0773	45.6	0.0790	46.5
MA	0.0733	0.0336	45.9	0.0336	45.9	0.0338	46.1
MD	0.101	0.0362	36.0	0.0388	38.5	0.0417	41.5
ME	0.0334	0.0190	56.7	0.0190	56.7	0.0190	56.8
MI	0.129	0.0689	53.4	0.0690	53.5	0.0691	53.6
MN	0.186	0.0278	14.9	0.0278	14.9	0.0278	14.9
MO	0.124	0.0419	33.8	0.0476	38.4	0.0563	45.5
MS	0.0881	0.0308	34.9	0.0308	34.9	0.0308	34.9
MT	0.0679	0.00310	4.57	0.00401	5.90	0.00459	6.76
NC	0.240	0.157	65.6	0.184	76.8	0.198	82.6
ND	0.0168	0.00173	10.3	0.00175	10.4	0.00191	11.4
NE	0.124	0.000305	0.245	0.00224	1.81	0.00762	6.13
NH	0.0185	0.00965	52.0	0.00965	52.0	0.00965	52.0
NJ	0.0824	0.0304	36.9	0.0304	36.9	0.0307	37.2
NM	0.125	0.0000129	0.0103	0.000346	0.277	0.00283	2.26
NV	0.449	0.0314	6.99	0.0722	16.1	0.117	26.0
NY	0.500	0.227	45.4	0.268	53.5	0.291	58.2
OH	0.198	0.0664	33.5	0.0664	33.5	0.0664	33.5
OK	0.102	0.000190	0.186	0.000190	0.186	0.000190	0.186
OR	0.354	0.101	28.5	0.115	32.5	0.135	38.1
PA	0.119	0.0442	37.1	0.0447	37.5	0.0450	37.7
RI	0.0224	0.0112	49.9	0.0112	49.9	0.0112	49.9
SC	0.126	0.0351	27.9	0.0351	27.9	0.0351	27.9
SD	0.0341	0.000113	0.332	0.000278	0.816	0.000485	1.42
TN	0.209	0.102	48.9	0.131	62.8	0.151	72.1
TX	1.03	0.0295	2.86	0.141	13.7	0.262	25.4
UT	0.199	0.0131	6.56	0.0366	18.4	0.0575	28.9
VA	0.197	0.0691	35.1	0.0703	35.7	0.0740	37.5
VT	0.0132	0.00959	72.6	0.00959	72.6	0.00959	72.6
WA	0.467	0.230	49.4	0.304	65.1	0.344	73.8
WI	0.117	0.0359	30.7	0.0430	36.8	0.0483	41.3
WV	0.0501	0.0228	45.4	0.0242	48.2	0.0252	50.3
WY	0.0407	0	0	0.00000305	0.00748	0.0000279	0.0686

Table A16. State-Level Summary of Residential Outdoor Efficiency Potential, As Per Capita Savings by Efficiency Scenario, In Alphabetical Order.

	Current-Day	Basic Efficiency	High Efficiency	Leading-Edge Efficiency
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State	Demand (gpcd)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)
AK	53.7	36.2	67.4	37.8	70.3	39.3	73.2
AL	42.0	39.8	94.8	40.5	96.5	40.9	97.4
AR	23.8	4.42	18.6	4.42	18.6	4.42	18.6
AZ	52.9	1.72	3.25	6.45	12.2	12.2	23.1
CA	43.1	11.9	27.6	17.8	41.3	23.3	54.0
CO	34.0	0.352	1.04	1.86	5.47	4.67	13.7
CT	19.0	9.49	49.9	9.49	49.9	9.49	49.9
DC	11.8	4.13	35.1	4.44	37.8	4.86	41.3
DE	8.10	2.72	33.5	2.72	33.5	2.80	34.6
FL	42.9	23.2	54.1	27.8	64.9	31.3	73.0
GA	30.5	11.6	38.2	12.6	41.1	13.6	44.6
HI	53.7	29.6	55.1	35.0	65.1	38.5	71.6
IA	39.5	7.43	18.8	8.71	22.1	9.74	24.7
ID	72.3	6.17	8.53	6.20	8.58	9.39	13.0
IL	22.1	7.40	33.5	8.06	36.5	8.96	40.5
IN	19.2	6.43	33.6	6.44	33.6	6.66	34.7
KS	22.9	0.301	1.31	0.301	1.31	0.301	1.31
KY	42.8	14.7	34.4	15.8	37.0	16.9	39.4
LA	33.5	15.2	45.2	15.3	45.6	15.6	46.5
MA	9.70	4.45	45.9	4.45	45.9	4.47	46.1
MD	14.9	5.37	36.0	5.74	38.5	6.18	41.5
ME	22.5	12.7	56.7	12.7	56.7	12.8	56.8
MI	11.7	6.26	53.4	6.27	53.5	6.28	53.6
MN	29.9	4.46	14.9	4.46	14.9	4.46	14.9
MO	18.4	6.23	33.8	7.07	38.4	8.37	45.5
MS	27.5	9.60	34.9	9.60	34.9	9.60	34.9
MT	57.2	2.61	4.57	3.37	5.90	3.87	6.76
NC	21.1	13.8	65.6	16.2	76.8	17.4	82.6
ND	20.1	2.06	10.3	2.09	10.4	2.28	11.4
NE	58.0	0.142	0.245	1.05	1.81	3.56	6.13
NH	12.3	6.42	52.0	6.42	52.0	6.42	52.0
NJ	8.10	2.99	36.9	2.99	36.9	3.02	37.2
NM	53.8	0.00554	0.0103	0.149	0.277	1.22	2.26
NV	131	9.12	6.99	21.0	16.1	33.9	26.0
NY	23.0	10.5	45.4	12.3	53.5	13.4	58.2
OH	15.4	5.16	33.5	5.16	33.5	5.16	33.5
OK	23.7	0.0441	0.186	0.0441	0.186	0.0441	0.186
OR	76.4	21.8	28.5	24.8	32.5	29.1	38.1
PA	8.46	3.14	37.1	3.17	37.5	3.19	37.7

RI	19.0	9.49	49.9	9.49	49.9	9.49	49.9
SC	22.5	6.27	27.9	6.27	27.9	6.27	27.9
SD	35.5	0.118	0.332	0.290	0.816	0.506	1.42
TN	27.5	13.5	48.9	17.3	62.8	19.8	72.1
TX	32.1	0.919	2.86	4.40	13.7	8.18	25.4
UT	55.0	3.61	6.56	10.1	18.4	15.9	28.9
VA	21.0	7.35	35.1	7.49	35.7	7.87	37.5
VT	19.0	13.8	72.6	13.8	72.6	13.8	72.6
WA	55.3	27.3	49.4	35.9	65.1	40.8	73.8
WI	18.2	5.58	30.7	6.68	36.8	7.50	41.3
WV	25.7	11.7	45.4	12.4	48.2	12.9	50.3
WY	64.4	0	0	0.00482	0.00748	0.0442	0.0686

Commercial, Industrial, Institutional Sector

Table A17. State-Level Summary of CII Efficiency Potential, As Water Savings by Efficiency Scenario, In Alphabetical Order.

		Current-Day		Basic Efficiency		High Efficiency		Leading-Edge Efficiency
State	Gross Floor Area (billion square feet)	Demand (mafy)	Savings (mafy)	Reduction from Current-Day (%)	Savings (mafy)	Reduction from Current-Day (%)	Savings (mafy)	Reduction from Current-Day (%)
AK	0.789	0.0425	0.00305	7.17	0.00756	17.8	0.0217	51.0
AL	2.45	0.513	0.0685	13.3	0.169	33.0	0.282	55.0
AR	1.50	0.295	0.0475	16.1	0.104	35.2	0.166	56.3
AZ	4.61	0.458	0.0523	11.4	0.163	35.7	0.252	55.1
CA	26.4	1.34	0.213	15.9	0.518	38.6	0.857	63.9
CO	4.59	0.315	0.0519	16.5	0.118	37.5	0.199	63.3
CT	2.24	0.308	0.0345	11.2	0.0893	29.0	0.158	51.2
DC	0.495	0.0255	0.00548	21.5	0.0117	45.9	0.0187	73.2
DE	0.515	0.0362	0.00432	11.9	0.00951	26.3	0.0214	59.1
FL	10.8	1.27	0.234	18.4	0.543	42.7	0.839	65.9
GA	5.63	1.02	0.116	11.3	0.341	33.3	0.609	59.4
HI	1.13	0.0850	0.0163	19.2	0.0341	40.1	0.0571	67.2
IA	2.44	0.204	0.0226	11.1	0.0556	27.3	0.108	52.7
ID	1.09	0.0988	0.00894	9.05	0.0373	37.8	0.0672	68.0
IL	9.31	0.507	0.0537	10.6	0.155	30.6	0.286	56.4
IN	4.57	0.307	0.0169	5.49	0.0710	23.1	0.161	52.4
KS	1.98	0.144	0.0233	16.2	0.0520	36.2	0.0853	59.4
KY	2.50	0.733	0.0778	10.6	0.209	28.5	0.385	52.6
LA	2.47	0.406	0.0711	17.5	0.152	37.3	0.237	58.4
MA	4.59	0.407	0.0399	9.81	0.115	28.3	0.213	52.5
MD	2.95	0.0824	0.00743	9.03	0.0275	33.4	0.0483	58.6
ME	0.797	0.129	0.00932	7.22	0.0269	20.8	0.0535	41.4
MI	6.24	0.461	0.0523	11.3	0.143	31.1	0.254	55.1
MN	4.12	0.243	0.0237	9.74	0.0687	28.3	0.133	54.9
MO	4.00	0.365	0.0342	9.39	0.109	29.9	0.197	54.2
MS	1.45	0.182	0.0278	15.2	0.0613	33.6	0.109	59.7
MT	0.856	0.0476	0.00716	15.0	0.0167	35.1	0.0346	72.6
NC	5.51	0.506	0.0669	13.2	0.160	31.5	0.284	56.1
ND	0.606	0.0621	0.00455	7.33	0.0129	20.7	0.0390	62.9
NE	1.27	0.222	0.0285	12.8	0.0742	33.4	0.121	54.7

NH	0.838	0.0824	0.00804	9.75	0.0202	24.5	0.0391	47.4
NJ	6.14	0.243	0.0190	7.82	0.0635	26.1	0.134	54.8
NM	1.02	0.0980	0.0206	21.1	0.0381	38.9	0.0594	60.6
NV	2.46	0.503	0.104	20.7	0.211	41.9	0.322	64.0
NY	11.8	1.45	0.204	14.1	0.534	36.9	0.918	63.4
OH	7.64	0.778	0.0648	8.33	0.184	23.6	0.372	47.9
OK	1.86	0.195	0.0378	19.3	0.0746	38.2	0.118	60.4
OR	2.86	0.312	0.0565	18.1	0.112	36.1	0.195	62.4
PA	8.37	0.424	0.0385	9.09	0.115	27.2	0.226	53.4
RI	0.583	0.0926	0.0111	12.0	0.0290	31.3	0.0456	49.2
SC	2.56	0.266	0.0458	17.2	0.0924	34.7	0.145	54.5
SD	0.593	0.0579	0.00592	10.2	0.0183	31.6	0.0279	48.2
TN	3.83	0.617	0.0371	6.01	0.158	25.6	0.348	56.4
TX	15.1	1.73	0.472	27.2	0.806	46.5	1.14	65.6
UT	2.61	0.368	0.0651	17.7	0.149	40.6	0.253	68.7
VA	4.50	0.422	0.0588	13.9	0.140	33.2	0.234	55.4
VT	0.415	0.0546	0.00182	3.32	0.00809	14.8	0.0286	52.3
WA	4.98	0.387	0.0470	12.1	0.119	30.8	0.228	58.7
WI	4.43	0.360	0.0209	5.81	0.0642	17.8	0.166	45.9
WV	0.841	0.0971	0.00511	5.27	0.0166	17.1	0.0454	46.8
WY	0.692	0.0381	0.00422	11.1	0.0110	28.9	0.0248	65.0

Table A18. State-Level Summary of CII Efficiency Potential, As Floor Area-Normalized Savings by Efficiency Scenario, In Alphabetical Order.

	Current-Day	Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
State	Demand (gpsfy)	Savings (gpsfy)	Reduction from Current-Day (%)	Savings (gpsfy)	Reduction from Current-Day (%)	Savings (gpsfy)	Reduction from Current-Day (%)
AK	17.5	1.26	7.17	3.12	17.8	8.95	51.0
AL	68.2	9.10	13.3	22.5	33.0	37.5	55.0
AR	63.8	10.3	16.1	22.5	35.2	35.9	56.3
AZ	32.4	3.70	11.4	11.5	35.7	17.8	55.1
CA	16.6	2.64	15.9	6.40	38.6	10.6	63.9
CO	22.3	3.68	16.5	8.37	37.5	14.1	63.3
CT	44.8	5.02	11.2	13.0	29.0	23.0	51.2
DC	16.8	3.60	21.5	7.69	45.9	12.3	73.2
DE	22.9	2.73	11.9	6.02	26.3	13.5	59.1
FL	38.5	7.10	18.4	16.4	42.7	25.4	65.9
GA	59.2	6.72	11.3	19.7	33.3	35.2	59.4
HI	24.4	4.68	19.2	9.78	40.1	16.4	67.2
IA	27.3	3.02	11.1	7.44	27.3	14.4	52.7

ID	29.5	2.67	9.05	11.2	37.8	20.1	68.0
IL	17.8	1.88	10.6	5.43	30.6	10.0	56.4
IN	21.9	1.20	5.49	5.06	23.1	11.5	52.4
KS	23.6	3.82	16.2	8.54	36.2	14.0	59.4
KY	95.7	10.2	10.6	27.3	28.5	50.3	52.6
LA	53.7	9.39	17.5	20.0	37.3	31.3	58.4
MA	28.9	2.83	9.81	8.17	28.3	15.1	52.5
MD	9.09	0.820	9.02	3.03	33.4	5.32	58.6
ME	52.9	3.81	7.22	11.0	20.8	21.9	41.4
MI	24.1	2.73	11.3	7.48	31.1	13.3	55.1
MN	19.2	1.87	9.74	5.43	28.3	10.5	54.9
MO	29.7	2.79	9.39	8.87	29.9	16.1	54.1
MS	40.9	6.23	15.2	13.7	33.6	24.4	59.7
MT	18.1	2.73	15.0	6.37	35.1	13.2	72.6
NC	30.0	3.96	13.2	9.45	31.5	16.8	56.1
ND	33.4	2.44	7.33	6.92	20.7	21.0	62.9
NE	57.2	7.33	12.8	19.1	33.4	31.2	54.7
NH	32.0	3.12	9.75	7.85	24.5	15.2	47.4
NJ	12.9	1.01	7.82	3.37	26.1	7.09	54.8
NM	31.5	6.63	21.1	12.2	38.9	19.1	60.6
NV	66.6	13.8	20.7	27.9	41.9	42.6	64.0
NY	39.9	5.62	14.1	14.7	36.9	25.3	63.4
OH	33.2	2.76	8.33	7.83	23.6	15.9	47.9
OK	34.3	6.63	19.3	13.1	38.2	20.7	60.4
OR	35.5	6.45	18.1	12.8	36.1	22.2	62.4
PA	16.5	1.50	9.09	4.49	27.2	8.81	53.4
RI	51.8	6.19	12.0	16.2	31.3	25.5	49.2
SC	33.8	5.82	17.2	11.7	34.7	18.5	54.5
SD	31.8	3.25	10.2	10.0	31.6	15.3	48.2
TN	52.5	3.16	6.01	13.4	25.6	29.6	56.4
TX	37.3	10.2	27.2	17.3	46.5	24.5	65.6
UT	46.0	8.14	17.7	18.7	40.6	31.6	68.7
VA	30.6	4.25	13.9	10.1	33.2	16.9	55.4
VT	42.9	1.42	3.32	6.35	14.8	22.4	52.3
WA	25.3	3.07	12.1	7.80	30.8	14.9	58.7
WI	26.5	1.54	5.81	4.73	17.8	12.2	45.9
WV	37.6	1.98	5.27	6.42	17.1	17.6	46.8
WY	17.9	1.99	11.1	5.18	28.9	11.7	65.0

Utility Water Loss

Table A19. State-Level Summary of Utility Water Loss Efficiency Potential, As Water Savings by Efficiency Scenario, In Alphabetical Order.

	Current-Day	Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
State	Demand (maf)	Savings (maf)	Reduction from Current-Day (%)	Savings (maf)	Reduction from Current-Day (%)	Savings (maf)	Reduction from Current-Day (%)
AK	0.0107	0.000494	4.61	0.00453	42.3	0.00691	64.5
AL	0.584	0.309	52.9	0.418	71.5	0.482	82.5
AR	0.219	0.0982	44.8	0.146	66.6	0.174	79.4
AZ	0.0709	0	0	0.00107	1.51	0.00836	11.8
CA	0.403	0.0273	6.78	0.0550	13.7	0.119	29.6
CO	0.0481	0	0	0	0	0.000481	1.00
CT	0.0768	0.00339	4.42	0.0259	33.8	0.0454	59.1
DC	0.0334	0.0135	40.5	0.0214	64.0	0.0260	77.9
DE	0.0258	0.00839	32.5	0.0147	57.0	0.0188	73.0
FL	0.612	0.200	32.6	0.333	54.5	0.433	70.8
GA	0.477	0.181	37.9	0.274	57.4	0.346	72.6
HI	0.0259	0.00119	4.61	0.0110	42.3	0.0167	64.5
IA	0.159	0.0741	46.7	0.108	67.8	0.127	80.2
ID	0.0111	0	0	0	0	0.00211	19.1
IL	0.556	0.198	35.6	0.340	61.1	0.423	76.0
IN	0.218	0.0801	36.7	0.124	56.6	0.158	72.3
KS	0.143	0.0580	40.7	0.0915	64.1	0.111	77.9
KY	0.439	0.234	53.3	0.315	71.8	0.363	82.6
LA	0.293	0.0946	32.2	0.173	59.0	0.219	74.8
MA	0.238	0.0384	16.1	0.0622	26.2	0.107	44.9
MD	0.163	0.000226	0.139	0.0620	38.1	0.101	61.9
ME	0.0207	0.00252	12.1	0.00971	46.9	0.0139	67.3
MI	0.354	0.132	37.4	0.220	62.1	0.271	76.7
MN	0.203	0.0666	32.9	0.120	59.4	0.152	75.0
MO	0.285	0.125	43.6	0.188	65.9	0.225	79.0
MS	0.304	0.161	52.9	0.217	71.5	0.251	82.5
MT	0.00705	0	0	0	0	0.0000918	1.30
NC	0.358	0.0865	24.2	0.194	54.1	0.257	71.8
ND	0.0336	0.0130	38.8	0.0212	63.0	0.0260	77.2
NE	0.126	0.0782	62.2	0.0970	77.1	0.108	85.9
NH	0.0259	0.00211	8.16	0.0115	44.5	0.0170	65.8
NJ	0.765	0.578	75.5	0.644	84.2	0.690	90.2
NM	0.0182	0	0	0.0000548	0.301	0.000705	3.87

NV	0.0780	0.00866	11.1	0.0310	39.8	0.0491	62.9
NY	1.49	0.935	63.0	1.15	77.5	1.28	86.2
OH	0.504	0.192	38.1	0.315	62.5	0.388	77.0
OK	0.147	0.00511	3.46	0.0614	41.6	0.0945	64.1
OR	0.0772	0.0188	24.3	0.0419	54.3	0.0554	71.8
PA	0.315	0.0732	23.2	0.166	52.8	0.223	70.9
RI	0.0293	0	0	0.00881	30.0	0.0167	56.9
SC	0.315	0.183	58.2	0.235	74.7	0.266	84.4
SD	0.0362	0.0144	39.7	0.0230	63.5	0.0281	77.5
TN	0.458	0.158	34.5	0.258	56.3	0.332	72.4
TX	1.26	0.156	12.5	0.566	45.1	0.831	66.2
UT	0.0391	0	0	0	0	0.00709	18.1
VA	0.260	0.0416	16.0	0.128	49.2	0.179	68.7
VT	0.0128	0.000939	7.35	0.00562	44.0	0.00837	65.5
WA	0.159	0.0294	18.4	0.0800	50.3	0.110	69.4
WI	0.231	0.109	47.1	0.157	68.0	0.186	80.3
WV	0.0779	0.0316	40.5	0.0499	64.0	0.0606	77.9
WY	0.00519	0	0	0	0	0.000589	11.4

Table A20. State-Level Summary of Utility Water Loss Efficiency Potential, As Per Capita Savings by Efficiency Scenario, In Alphabetical Order.

	Current-Day	Basic Efficiency		High Efficiency		Leading-Edge Efficiency	
State	Demand (gpcd)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)	Savings (gpcd)	Reduction from Current-Day (%)
AK	15.7	0.722	4.61	6.63	42.3	10.1	64.5
AL	87.0	46.0	52.9	62.2	71.5	71.7	82.5
AR	64.0	28.6	44.8	42.6	66.6	50.8	79.4
AZ	9.29	0	0	0.140	1.51	1.10	11.8
CA	9.08	0.616	6.78	1.24	13.7	2.68	29.6
CO	6.61	0	0	0	0	0.0661	1.00
CT	25.2	1.11	4.42	8.51	33.8	14.9	59.1
DC	45.9	18.6	40.5	29.4	64.0	35.7	77.9
DE	23.1	7.51	32.5	13.2	57.0	16.9	73.0
FL	26.3	8.57	32.6	14.3	54.5	18.6	70.8
GA	41.5	15.7	37.9	23.8	57.4	30.1	72.6
HI	15.7	0.722	4.61	6.63	42.3	10.1	64.5
IA	50.1	23.4	46.7	34.0	67.8	40.2	80.2
ID	10.5	0	0	0	0	2.00	19.1
IL	41.5	14.8	35.6	25.3	61.1	31.5	76.0
IN	38.7	14.2	36.7	21.9	56.6	28.0	72.3

KS	45.0	18.3	40.7	28.8	64.1	35.0	77.9
KY	87.8	46.8	53.3	63.0	71.8	72.5	82.6
LA	52.2	16.8	32.2	30.8	59.0	39.0	74.8
MA	21.8	3.52	16.1	5.70	26.2	9.80	44.9
MD	26.7	0.0371	0.139	10.2	38.1	16.5	61.9
ME	27.1	3.29	12.1	12.7	46.9	18.2	67.3
MI	42.6	15.9	37.4	26.5	62.1	32.7	76.7
MN	39.8	13.1	32.9	23.6	59.4	29.8	75.0
MO	47.4	20.7	43.6	31.2	65.9	37.4	79.0
MS	87.0	46.0	52.9	62.2	71.5	71.7	82.5
MT	8.42	0	0	0	0	0.110	1.30
NC	36.0	8.69	24.2	19.5	54.1	25.8	71.8
ND	43.6	16.9	38.8	27.5	63.0	33.7	77.2
NE	70.6	43.9	62.2	54.5	77.1	60.7	85.9
NH	25.9	2.12	8.16	11.5	44.5	17.1	65.8
NJ	77.3	58.3	75.5	65.1	84.2	69.7	90.2
NM	8.24	0	0	0.0248	0.301	0.319	3.87
NV	22.8	2.53	11.1	9.07	39.8	14.4	62.9
NY	73.0	45.9	63.0	56.6	77.5	62.9	86.2
OH	43.1	16.4	38.1	27.0	62.5	33.2	77.0
OK	36.6	1.27	3.46	15.2	41.6	23.5	64.1
OR	19.7	4.81	24.3	10.7	54.3	14.2	71.8
PA	24.7	5.72	23.2	13.0	52.8	17.5	70.9
RI	25.2	0	0	7.57	30.0	14.3	56.9
SC	65.3	38.0	58.2	48.8	74.7	55.1	84.4
SD	44.2	17.5	39.7	28.1	63.5	34.3	77.5
TN	55.7	19.2	34.5	31.4	56.3	40.4	72.4
TX	37.8	4.71	12.5	17.1	45.1	25.0	66.2
UT	10.3	0	0	0	0	1.87	18.1
VA	32.5	5.19	16.0	16.0	49.2	22.3	68.7
VT	25.7	1.89	7.35	11.3	44.0	16.8	65.5
WA	18.2	3.35	18.4	9.14	50.3	12.6	69.4
WI	50.5	23.8	47.1	34.3	68.0	40.5	80.3
WV	45.9	18.6	40.5	29.4	64.0	35.7	77.9
WY	9.54	0	0	0	0	1.08	11.4