

Snapshot Water Budget for WRIA 45 Sub-Watersheds ¹¹

	Sub-watersheds	2002 M&D Water Use (cfs)		2025 M&D Water Use (cfs)		Flows (cfs)			Irrigation Permits and Certs. Qi (cfs) ^{6,9}	Irrigation Claims Qi (cfs) ^{7,9}	W.R. Apps. Qi (cfs) ⁸	W.R. for Comm/Industrial	W.R. for Fish Propagation	Estimated CIR ¹⁰
		MDD ¹	ADD ²	MDD ¹	ADD ²	10% ³	50% ⁴	90% ⁵						
Leavenworth-Lake Wenatchee CCD	Chiwaukum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.0	0.0	0.0	0.0
	Chiwawa	0.8	0.3	1.0	0.4	273.8	146.2	89.0	34.4	34.1	0.1	0.0	33.0	
	Chumstick	1.2	0.5	1.5	0.6	0.0	0.0	0.0	17.4	3.9	6.7	0.0	0.5	
	Icicle	4.6	1.8	9.3	3.7	259.0	134.7	93.1	261.3	11.7	1.0	0.0	53.4	
	Lake Wenatchee	0.8	0.3	1.0	0.4	1050.3	598.0	390.7	1.1	3.7	18.4	0.0	0.0	
	Little Wenatchee	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Nason	0.5	0.2	0.7	0.3	165.3	82.1	42.3	3.5	7.6	1.1	0.0	0.0	
	Upper Wenatchee	0.9	0.4	1.2	0.5	1289.8	719.6	468.4	3.2	5.9	0.0	0.0	0.0	
White	0.1	0.1	0.2	0.1	599.3	277.3	191.4	1.6	24.4	0.1	0.0	0.0		
SUBTOTAL		9.0	3.6	14.9	6.0				322.9	91.4	27.4	0.0	86.9	
Cashmere CCD	Lower Wenatchee	5.5	2.2	7.3	2.9	1337.8	727.8	414.6	258.0	176.4	7.2	3.5	37.5	
	Mission	3.6	1.4	4.4	1.8	4.3	2.2	1.5	8.8	31.6	0.1	0.9	0.0	
	Peshastin	0.7	0.3	0.8	0.3	74.2	43.8	34.1	4.8	63.7	18.8	0.0	0.0	
SUBTOTAL		9.7	3.9	12.5	5.0				271.6	271.7	26.1	4.4	37.5	
Total - WRIA 45		18.7	7.5	27.4	11.0	1337.8	727.8	414.6	594.5	363.1	53.5	4.4	124.4	45.6

NOTES:

W.R. - Water Right, Apps - Application, Certs - Certificates, CCD - County Census Division, Qi - Instantaneous Water Right, cfs - cubic feet per second

(1) Municipal and Domestic Demand (M&D) is reported as max day demand (MDD, high use) for all water supply groups (group A, group B, exempt, etc.) for both 2002 and 2025. Max Day Demand is the day of the year having the highest water demand.

(2) Municipal and Domestic Demand is reported as average day demand (ADD, medium use) for all water supply groups (group A, group B, exempt, etc.) for both 2002 and 2025. Average Day Demand represents an average daily demand in a year.

(3) 10% flow (or high flow) represents the flow that has a 10% chance of being equaled or exceeded in any one year. The 10% flow is the average September 10% exceedance flow.

(4) 50% flow (or average flow) represents the flow that has a 50% chance of being equaled or exceeded in any one year. The 50% flow is the average September 50% exceedance flow.

(5) 90% flow (or low flow) represents the flow that has a 90% chance of being equaled or exceeded in any one year. The 90% flow is the average September 90% exceedance flow. (September generally has the lowest 90% exceedance flow).

(6) Irrigation Permits and Certificates obtained from the Technical Assessment (MWG, 2003). Instantaneous Water Rights were selected when the first purpose of use is for Irrigation.

(7) Irrigation Claims obtained from the Technical Assessment (MWG, 2003). Instantaneous Water Rights were selected when the first purpose of use is for Irrigation.

(8) Water Right Applications instantaneous quantities obtained from the Technical Assessment (MWG, 2003). Includes applications for all purposes of use.

(9) Irrigation permits, certificates and claims may be duplicative and indicate higher than actual irrigation use.

(10) Crop Irrigation Requirement represents the estimated consumptive irrigation use of crops in WRIA 45. Reported for total watershed only (MWG, 2003).

(11) The comparison shows water use (both groundwater and surface water use as represented by water rights) and surface water flows. Groundwater storage has not been assessed as part of this snapshot water budget. Water use estimates assume that all irrigation permits, certificates and claims are put to full use (although some claims may be duplicative). Flow estimates are representative of the range of flows occurring in the sub-watershed in September, a "low flow" month. This results in a water budget that is representative of the range of natural flow and municipal and domestic water use conditions that could occur in the summer months. However other water uses (irrigation, commercial/industrial, and fish uses) may be conservative.