

WAC 173-546-070 Reservation of water for specific future uses.

(1) Using the watershed plan as a primary expression of public interest, and consistent with the authority under RCW 90.54.050(1) and 90.82.130(4), the department determines that there is water available, and hereby reserves an amount of surface and groundwater, up to five cubic feet per second (5 cfs), for specific future beneficial uses.

(a) The priority date for uses under the reservation is the effective date of this chapter.

(b) The reservation is not subject to the instream flows established in WAC 173-546-050.

(c) Beneficial uses eligible for the reservation include domestic, stock watering, commercial agriculture, and commercial/light industrial uses, consistent with the recommendations of the planning unit and the framework established by the Entiat watershed plan. The 5 cfs of reserved water use will be monitored at the USGS Gauge No. 12452990 (Entiat near Entiat, river mile 1.4), identified in the watershed plan as the "Keystone" gauge. Allocation of water from the reservation will be made as follows.

(2) Domestic and stock watering. The department may allocate up to 1 cfs for these uses. This amount is available for appropriation anywhere within the Entiat River basin.

(a) Outdoor irrigation. The department may allocate water for up to one-half acre of lawn or noncommercial garden from the domestic and stock watering reserve.

(3) Commercial agriculture. The department may allocate up to 3 cfs for these uses. This amount is available for appropriation only in the Lower Entiat stream management unit as identified in WAC 173-546-040, generally being within the lower 16.2 river miles of the Entiat River watershed, and downstream of the area known as the "Stillwater" reach.

(4) Commercial and light industrial uses. The department may allocate up to 1 cfs for these uses. This amount is available for appropriation only in the Lower Entiat stream management unit as identified in WAC 173-546-040, generally being within the lower 16.2 river miles of the Entiat River watershed, and downstream of the area known as the "Stillwater" reach.

(5) A water right permit issued from the reserve must be consistent with the requirements of RCW 90.03.290.

(6) All water uses from the reserve must be implemented using water use efficiency and conservation practices, consistent with the watershed plan.

(7) This reservation of water shall only be put to beneficial use within the stream management units defined by this chapter. Applications for the withdrawal of water for purposes outside of the stream management units defined in this chapter shall be denied by the department.

(8) A record of all withdrawals from the reservation shall be maintained by the department. For accounting purposes, the department shall use the assumptions and estimates outlined in the plan, which include:

(a) In-house domestic uses: A per capita net use of thirty-five gallons per day.

(b) Outdoor irrigation shall be consistent with the guidelines in Tables 4-14 and 4-15 (below), and with other relevant information as it becomes available.

(c) Commercial agriculture: The consumptive amount of the beneficial use shall be consistent with the crop irrigation requirement

specified in Tables 4-14 and 4-15 (below), and with other relevant information as it becomes available. The consumptive amount shall also be consistent, when appropriate, with any amount of conveyance water made unavailable to the river through irrigation bypass.

Table 4-14. Monthly tree water use¹ (ac-in) at WSU Tree Fruit Research Center, 1972-2002.

YEAR	APR	MAY	JUN	JUL	AUG	SEP	OCT ²	SEASON TOTAL
1972	2.03	5.18	7.47	9.20	8.03	4.43	2.00	38.34
1973	2.28	5.40	9.22	11.48	9.80	4.60	2.00	44.78
1974	1.74	4.57	8.69	9.21	8.95	5.21	2.00	40.37
1975	1.72	5.26	8.33	10.49	8.88	4.66	2.00	41.34
1976	1.84	2.82	7.86	10.04	6.71	4.84	2.00	36.11
1977	1.69	4.49	6.67	8.32	5.43	4.32	2.00	32.92
1978	1.92	5.18	8.07	10.20	8.25	4.63	2.00	40.25
1979	2.10	3.78	8.11	9.45	8.31	3.28	2.00	37.03
1980	1.66	4.52	6.25	9.72	7.06	3.61	2.00	34.82
1981	1.61	4.26	6.19	8.53	7.63	3.76	2.00	33.98
1982	1.61	4.60	7.18	8.06	6.74	3.22	2.00	33.41
1983	1.44	5.20	6.66	7.18	6.53	3.89	2.00	32.90
1984	1.47	3.92	6.42	9.86	7.89	3.26	2.00	34.82
1985	1.72	5.18	8.34	10.71	7.93	3.13	2.00	39.01
1986	1.74	4.65	7.69	8.56	7.97	4.08	2.00	36.69
1987	1.88	4.75	7.30	8.28	8.09	4.46	2.00	36.76
1988	1.56	4.22	6.38	10.06	7.57	4.16	2.00	35.95
1989	1.79	4.47	7.65	9.40	7.13	4.43	2.00	36.87
1990	1.78	3.91	6.69	9.39	6.83	4.55	2.00	35.15
1991	1.87	4.21	6.41	10.00	7.42	4.48	2.00	36.39
1992	2.08	6.34	8.58	8.75	7.65	4.22	2.00	39.62
1993	1.10	4.75	6.36	7.46	7.20	3.90	2.00	32.77
1994	1.69	4.74	8.23	12.41	8.53	4.67	2.00	42.27
1995	1.47	5.28	7.90	10.52	7.90	4.66	2.00	39.73
1996	1.53	4.34	8.54	11.02	9.58	4.65	2.00	41.66
1997	1.14	4.27	7.22	9.16	7.30	3.48	2.00	34.57
1998	1.49	3.66	7.81	9.52	8.29	4.75	2.00	37.52
1999	1.60	4.57	8.03	9.31	7.26	4.00	2.00	36.77
2000	1.65	4.38	8.02	9.85	8.56	3.66	2.00	38.12
2001	1.39	4.98	7.06	10.23	7.65	4.35	2.00	37.66
2002	1.49	4.12	7.69	9.83	7.82	3.81	2.00	36.76
MO. AVG. SINCE 1972	1.68	4.58	7.52	9.55	7.77	4.17	2.00	37.27 ac-in

1. Data have already been adjusted using pan evaporation & KC value to approximate orchard tree water use.
 2. The October value of 2 acre-inches was estimated based on miscellaneous October measurements provided by the WSU Tree Fruit Research Center, and conversations with Tim Smith, WSU Cooperative Extension. April through September values are based on data collected by T. Smith.
- * Note: Actual irrigation rates must be 10 to 40% higher than tree use, depending on irrigation efficiency

(This table is from the watershed plan, based on the *State of Washington Irrigation Guide* and supplemented by Washington State Tree Fruit Research data collected in Wenatchee WA.)

Table 4-15. Average monthly tree and pasture/turf irrigation water use (ac-in) estimates.

Description of Value	Apr	May	Jun	Jul	Aug	Sep	Oct	Season (ac-in)
Average tree fruit water use by month, based on 1972-2002 WSU data.	1.68	4.58	7.52	9.55	7.77	4.17	2.00	37.27
Average tree water use by month, with 65% application efficiency.	2.58	7.05	11.57	14.69	11.95	6.42	3.08	57.34
Average Pasture/Turf water use by month (85% of WSU tree fruit water use avg. value).	1.43	3.89	6.39	8.12	6.60	3.54	1.70	31.68
Average Pasture/Turf water use by month, with 65% efficiency.	2.20	5.99	9.83	12.49	10.16	5.45	2.62	48.74

(This table is from the watershed plan, based on the *State of Washington Irrigation Guide* and supplemented by Washington State Tree Fruit Research data collected in Wenatchee WA.)

(d) Commercial and light industrial: The consumptive amount shall be the amount needed for the specific purpose, as determined by the department and/or the Chelan-Douglas health district.

(9) Since all uses from the reserve will have the same priority date, the following will guide water supply decisions in times of water shortage:

(a) Among the three use categories: Domestic and stock-watering uses will be met first, followed by commercial agriculture and finally commercial/light industrial.

(b) Within each use category, the date of first beneficial use will be used. The use with the earliest date will be satisfied first.

(10) The reservation is created in the context of the year 2025 planning horizon of the watershed plan. Future water supplies may also be available concurrently, using alternative water sources such as storage, reuse and conservation (WAC 173-546-100).

(11) The reservation will be evaluated by the department and the Entiat planning unit no less than every five years: 2010, 2015, and 2020. The allocated and unallocated amounts for each use will be reviewed, as well as the allocated and unallocated amounts for the entire reserve. Modifications to the program may therefore be implemented by rule, if needed.

(12) The department shall notify both Chelan County and the planning unit or its successor, in writing, when it determines that fifty percent, seventy-five percent, and one hundred percent, respectively, of the reservation is allocated. The department shall also issue a public notice in a newspaper of general circulation for the region at the same three junctures.

(13) The department shall require metering and reporting for permitted surface and groundwater allocations from the reservation. If more accurate water use data is needed the department may, after consulting with the EWPU (or its successor) and Chelan County, require metering and reporting for groundwater withdrawals otherwise exempted from permit requirements under RCW 90.44.050. Public water system providers will be required to meter.

[Statutory Authority: Chapters 43.27A, 90.54, 90.22, and 90.82 RCW. WSR 05-16-114 (Order 04-11), § 173-546-070, filed 8/3/05, effective 9/3/05.]