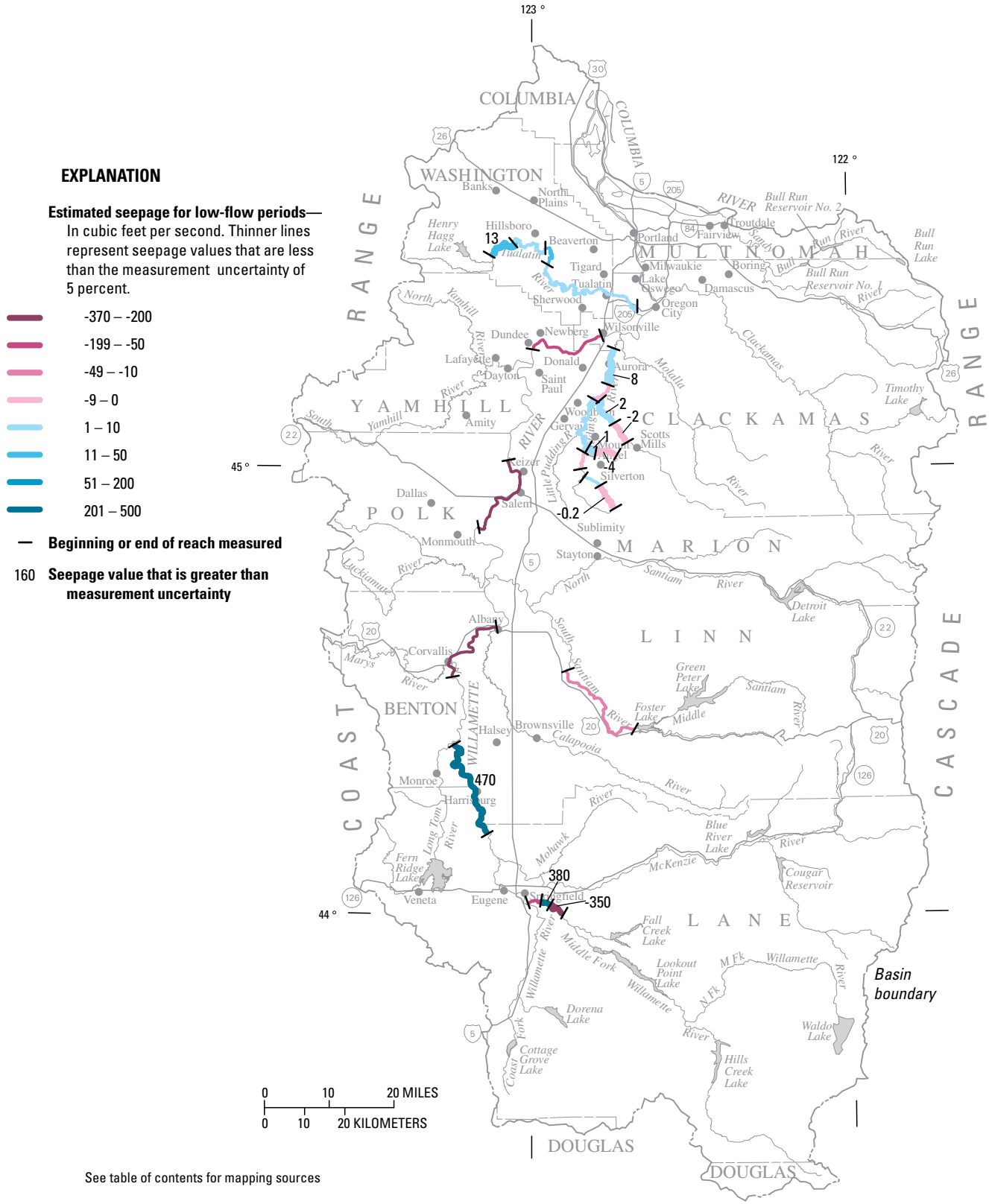

Figure 15. Estimated seepage for selected streams during low flow periods, summer and fall 1993, 1996, and 2000, Willamette Basin, Oregon.

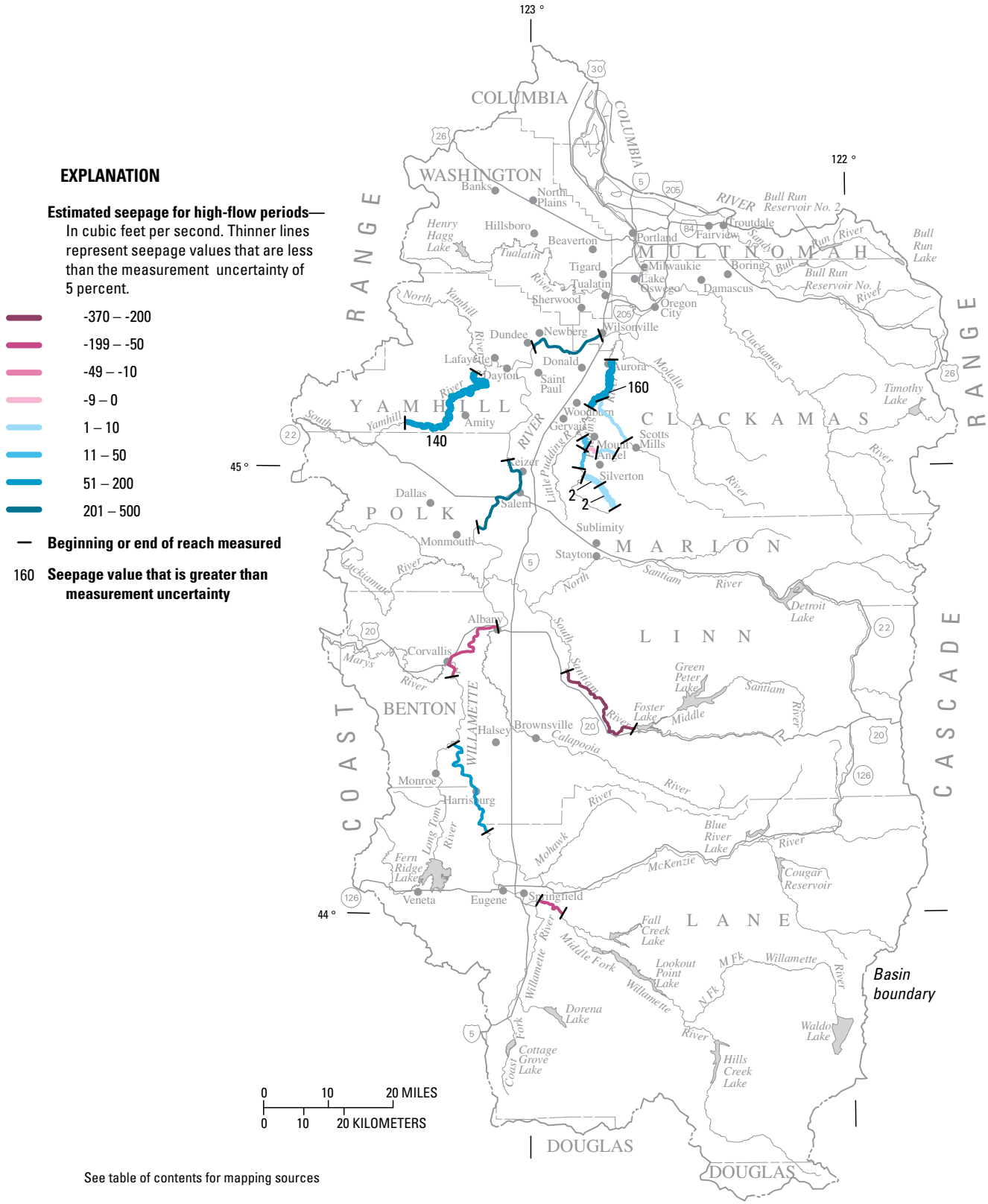

Figure 16. Estimated seepage for selected streams during high flow periods, spring 1996 and 2000, Willamette Basin, Oregon.

Table 3. Selected stream gains and losses in the Willamette Basin, Oregon.

[RM, river mile; WSU, Willamette silt unit; USU, upper sedimentary unit; ft, feet; d, day; Kv, vertical hydraulic conductivity, MF, Middle Fork. Unit gain is calculated by dividing volumetric gain by area over which gain occurs. For seepage runs, the area is the estimated width times the distance between river miles. For seepage meters, the area is the area of the seepage meter drum]

Stream	From RM	To RM	Date	Streambed material	Seepage run unit gain (+) or loss (-) (ft/d)	Seepage meter unit gain (ft/d)	Heat tracing unit gain (ft/d)	Heat tracing Kv (ft/d)	Estimated river width (ft)
Case Creek	at 0.1	na	August 2000	WSU	na	0.003	0.10	0.67	--
Little Pudding River	at 9.0	na	August 2000	WSU	na	0.001	0.02	na	--
Upper Pudding River	at 48.5	na	August 2000	WSU	na	0.006	0.01	0.33	--
Zollner Creek	at 1.0	na	August 2000	WSU	na	0.249	0.01	0.04	--
Lower Pudding River	at 22.5	na	August 2000	WSU	na	0.001	0.17	0.25	--
Butte Creek	at 2.5	na	August 2000	WSU	na	0.004	0.15	na	--
Butte Creek	5.9	1	9/12/2000	WSU	0.15	na	na	na	20
Pudding River	17.5	8.1	9/21-22/2000	WSU	0.29	na	na	na	50
MF Willamette River	195	192.8	7/23/1996	USU	-26.03	na	na	na	200
MF Willamette River	192.8	190.5	7/23/1996	USU	27.14	na	na	na	200
MF Willamette River	169.6	149.6	7/24/1996	USU	3.85	na	na	na	200
Johnson Creek*	3.2	2.2	7/21-22/2000	USU	0.53	na	na	na	50
Crystal Springs Creek*	1.8	0	8/7/2000	USU	4.87	na	na	na	20

* Gains in Johnson and Crystal Springs Creeks result from spring flow over distances shorter than the reach between discharge measurements. Consequently, seepage run unit gain is a minimum value.