

Table 5. Summary of major-ion concentrations in water samples collected during baseline, 1995–98, and artificial recharge, 1996–98, conditions

[MCL, Maximum Contaminant Level; DWEL, Drinking-Water Equivalent Level; SMCL Secondary Maximum Contaminant Level; mg/L, milligrams per liter; <, less than; %, median value is estimated by using a log-probability regression to predict values less than the detection limit; --, not determined. The first set of numbers under each heading (for example, 8.5–150) indicates the range in concentrations. The number in parentheses () indicates the number of samples collected, and the number below (for example, 96) is the median value]

Data-collection site (figs. 1, 2, 3, or 5)	Water-quality conditions (dates of collection)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Bicarbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)
U.S. Environmental Protection Agency (1999) drinking-water criteria									
		--	--	20 (DWEL)	--	--	250 (SMCL)	250 (SMCL)	4.0 (MCL)
Surface-water monitoring sites [Little Arkansas River]									
07143672 (near Halstead)	Baseline (February 1995 through September 1997)	8.3–130 (70) 96	1.6–26 (70) 14	4.4–200 (70) 83	5.4–18 (70) 8.4	33–380 (70) 230	<5.0–75 (70) 41*	8–400 (70) 130	0.10–2.7 (19) 0.30
	Recharge (October 1997 through July 1998)	16–170 (33) 110	3.3–36 (33) 18	11–300 (33) 100	4.6–9.5 (33) 7.4	34–460 (33) 260	9.1–96 (33) 33	20–930 (34) 190	0.29, 0.29 (3) --
07144100 (near Sedgwick)	Baseline (February 1995 through September 1997)	12–120 (51) 66	2.2–24 (51) 12	4.8–120 (51) 48	5.2–10 (51) 7.8	48–360 (51) 190	<5.0–210 (51) 40	8–260 (51) 68	0.12–0.82 (16) 0.28
	Recharge (October 1997 through July 1998)	17–120 (22) 70	3.0–24 (22) 12	11–110 (22) 48	5.1–9.2 (22) 7.2	22–340 (22) 220	11–71 (22) 39	17–190 (23) 95	0.19–0.28 (3) --
Ground-water or disinfected-water monitoring sites									
Background wells									
	Baseline (February 1995 through September 1997)	45–120 (38) 74	4.4–18 (38) 12	21–91 (38) 44	1.4–5.7 (38) 3.0	210–360 (38) 230	<5.0–190 (38) 77	<5–65 (38) 26*	<0.02–0.41 (26) 0.33*
	Recharge (October 1997 through July 1998)	72–94 (7) 77	12–15 (7) 13	42–74 (7) 46	2.7–3.4 (7) 3.2	230–330 (7) 330	60–100 (7) 82	25–49 (7) 27	0.28, 0.32 (3) --
Domestic wells near Halstead									
	Baseline (April 1998)	41–80 (3) --	4.8–15 (3) --	24–75 (3) --	2.2–2.7 (3) --	120–220 (3) --	16–63 (3) --	11–69 (3) --	-- --