

Table 11.--White River model simulation summary

Initial river conditions		Fayetteville treatment-plant effluent								Water temperature (° C)	Minimum downstream dissolved-oxygen concentration and location		Projected concentrations and loadings to Beaver Lake													
Dis-charge (ft <sup>3</sup> /s)	Dis-solved oxygen (mg/L)	Dis-charge (ft <sup>3</sup> /s)	Dis-solved oxygen (mg/L)	CBOD5 (mg/L)	Total ORG-N (mg/L)	Total NH3-N (mg/L)	Total NO2-N (mg/L)	Total NO3-N (mg/L)	Total PO4-P (mg/L)		Dis-charge (ft <sup>3</sup> /s)	Dis-solved oxygen (mg/L)	CBOD5		Total ORG-N		Total NH3-N		Total NO2-N		Total NO3-N		Total PO4-P			
												Mg/L	Lb/d	Mg/L	Lb/d	Mg/L	Lb/d	Mg/L	Lb/d	Mg/L	Lb/d	Mg/L	Lb/d	Mg/L	Lb/d	
1.37	3.8	11.2	7.8	30	15	4.1	0.13	2.6	8.1	29	4.6	681.2	12.97	7.5	5.0	352	0.02	1.4	.09	6.3	.02	1.4	.63	44.0	0.62	43.0
1.37	3.8	11.2	7.8	20	-----	10.0	.13	2.6	8.1	29	4.7	681.4	12.97	7.5	3.4	239	.01	.7	.02	1.4	.00	.0	.63	44.0	.62	43.0
1.37	3.8	11.2	7.8	10	-----	10.0	.13	2.6	8.1	29	5.2	681.4	12.97	7.5	1.8	126	.01	.7	.02	1.4	.00	.0	.63	44.0	.62	43.0
1.37	3.8	11.2	7.8	10	-----	5.0	.13	2.6	8.1	29	5.7	681.6	12.97	7.5	1.8	126	.01	.7	.01	.7	.00	.0	.32	22.4	.62	43.0
1.37	3.8	11.2	7.8	10	-----	3.0	.13	2.6	8.1	29	5.9	681.6	12.97	7.5	1.8	126	.01	.7	.01	.7	.00	.0	.20	14.0	.62	43.0
1.37	3.8	11.2	7.8	5	-----	2.0	.13	2.6	1.0	29	6.2	682.0	12.97	7.5	1.0	69.0	.01	.7	.01	.7	.00	.0	.14	9.8	.08	5.3
1.37	4.5	11.2	9.2	30	15	4.1	.13	2.6	8.1	19	6.4	680.9	12.97	7.6	9.4	655	.84	58.7	1.5	105	.23	16.1	1.7	121	2.5	175
1.37	4.5	11.2	9.2	20	-----	10.0	.13	2.6	8.1	19	6.7	680.9	12.97	8.8	6.4	446	.03	2.1	.68	47.5	.12	8.4	1.9	135	2.5	175
1.37	4.5	11.2	9.2	10	-----	10.0	.13	2.6	8.1	19	7.2	680.9	12.97	9.2	3.4	236	.03	2.1	.68	47.5	.12	8.4	1.9	135	2.5	175
1.37	4.5	11.2	9.2	10	-----	5.0	.13	2.6	8.1	19	7.5	681.0	12.97	9.2	3.4	236	.03	2.1	.34	23.8	.06	4.2	1.0	72.0	2.5	175
1.37	4.5	11.2	9.2	10	-----	3.0	.13	2.6	8.1	19	7.6	681.0	12.97	9.2	3.4	236	.03	2.1	.21	14.7	.04	2.8	.67	46.8	2.5	175
1.37	4.5	11.2	9.2	5	-----	2.0	.13	2.6	1.0	19	8.0	681.2	12.97	9.2	1.9	131	.03	2.1	.14	9.8	.02	1.4	.49	34.3	.31	21.7
1.37	3.8	a5.6	7.8	5	-----	2.0	.13	2.6	8.1	29	6.2	682.3	7.37	7.5	.29	11.6	.01	.7	.00	.00	.00	.0	.04	2.8	.08	3.2
b2.37	c3.8	11.2	7.8	10	-----	10.0	.13	2.6	8.1	29	5.3	681.4	13.97	7.5	2.0	153	.02	1.5	.03	2.3	.01	.8	.68	51.2	.68	51.2
b2.37	d7.8	11.2	7.8	10	-----	10.0	.13	2.6	8.1	29	5.3	681.4	13.97	7.5	2.0	153	.02	1.5	.03	2.3	.01	.8	.68	51.2	.68	51.2
e5.37	c3.8	11.2	7.8	10	-----	10.0	.13	2.6	8.1	29	5.4	681.2	16.97	7.5	2.7	248	.09	8.2	.08	7.3	.01	.9	.81	74.1	.84	76.6
e5.37	d7.8	11.2	7.8	10	-----	10.0	.13	2.6	8.1	29	5.4	681.2	16.97	7.5	2.7	248	.09	8.2	.08	7.3	.01	.9	.81	74.1	.84	76.6
b2.37	c3.8	11.2	7.8	5	-----	2.0	.13	2.6	8.1	29	6.2	681.9	13.97	7.5	1.2	89.4	.02	1.5	.01	.8	.00	.0	.15	11.3	.68	51.2
b2.37	d7.8	11.2	7.8	5	-----	2.0	.13	2.6	8.1	29	6.2	681.9	13.97	7.5	1.2	89.4	.02	1.5	.01	.8	.00	.0	.15	11.3	.68	51.2
e5.37	c3.8	11.2	7.8	5	-----	2.0	.13	2.6	8.1	29	6.2	681.7	16.97	7.5	1.8	164	.09	8.2	.02	1.8	.00	.0	.19	17.4	.84	76.6
e5.37	d7.8	11.2	7.8	5	-----	2.0	.13	2.6	8.1	29	6.2	681.7	16.97	7.5	1.8	164	.09	8.2	.02	1.8	.00	.0	.19	17.4	.84	76.6
1.37	3.8	e15.2	7.8	6.5	.26	1.7	.10	1.9	6.0	29	6.2	681.7	16.97	7.5	1.8	166	.17	15.5	.04	3.7	.01	.9	.22	20.1	.84	76.6

a Reflects 50-percent reduction in flow from wastewater-treatment plant.

b Reflects 1-cubic-foot-per-second-flow augmentation from Lake Sequoyah.

c Reflects observed percent saturation of Lake Sequoyah discharge.

d Reflects saturation of Lake Sequoyah discharge.

e Reflects 4-cubic-foot-per-second-flow augmentation from Lake Sequoyah.