



2.0 Existing Water Rights

2.1 Surface Water

2.1.1 Kansas River

The City recently obtained approval for a new water right #44954 on the Kansas River. This water right allows an annual diversion of 8,152 million gallons (25,017.57 ac-ft/year). This is equal to an average day demand of 22.3 mgd. The maximum permitted diversion rate is 31,202 gpm, which is equal to 44.9 mgd. The permitted point of diversion is the existing intake on the Kansas River that supplies the Kaw WTP.

The City also has two other existing water rights permits to divert surface water from the Kansas River. Surface water rights are summarized in Table II-1.

Table II-1 Kansas River Surface Water Rights						
Water Right Permit Number	Date of Permit	Status of Permit	Annual Quantity ac-ft	Annual Quantity mgd	Maximum Diversion Rate cfs	Maximum Diversion Rate mgd
DG002	02/07/55	Vested	1,712.56	1.53	10.25	6.62
2019	11/30/53	Appropriated	8,961.00	8.00	15.47	10.00
44954	01/18/02	Approved	25,017.57	22.30	69.52	44.90

The new water right includes a provision that limits the total water diverted under the existing surface water right, existing groundwater rights summarized later in this Chapter, and the new surface water right to the maximum annual volume of 8,152 million gallons (22.3 mgd) and the maximum diversion rate of 31,202 gpm (44.9 mgd).

2.1.2 Clinton Reservoir

The City has two contracts with the Kansas Water Office (KWO) which allow diversion of water from Clinton Reservoir. Contract 77-1 was signed December 29, 1977. The length of the contract is 40 years, so the City will need to renegotiate the contract by December 2017. Provisions in the contract allow the State to reduce the amount available to the City to “best provide for the health, safety, and general welfare of the people of this state as determined by the State” (1977 Contract). The Contract allows for the diversion of 3,650 million gallons per year (10 mgd) at a maximum diversion rate of 25 mgd.



On August 9, 1990, the City entered into Contract 90-5 with the State of Kansas for additional diversions from Clinton Reservoir. The contract allows for an annual diversion of 1,460 million gallons (4 mgd) at a maximum diversion rate of 25 mgd. The contract period is for 40 years beginning on January 1, 1991. The contract contains the following requirement:

“The Purchaser is obligated to utilize 100 percent of the water supply under its contract number 77-1 before any use can be made of water under this contract.”

According to staff correspondence, the total annual diversion allowed under contract 77-1 has been reduced to 3,468,957,286 gallons (9.5 mgd). Similarly, the total annual diversion allowed under contract 90-5 has been reduced to 1,287,481,489 gallons (3.52 mgd). Therefore, the total average annual yield of the reservoir is 13.02 mgd and the maximum diversion rate is 25 mgd.

It should be noted that the State is considering a further reduction in the available supply to the City due to a request made by the Tri-counties water districts. Their application is for 200 million gallons per year (0.55 mgd). Other users may also apply to divert water from Clinton Reservoir. The State has the right to consider the overall needs of the potential users of the reservoir and could reduce the supply available to Lawrence further. City staff is actively discussing the KWO’s plans for Clinton Reservoir as the State’s decisions have immediate impacts on the City’s water supply system.

2.2 Groundwater Supplies

The City owns four groundwater rights permits to divert water from the Kansas River alluvium. Table II-2 summarizes the existing water rights.



<p align="center">Table II-2 Existing Groundwater Rights</p>							
Water Rights Permit Number	Permit Date	Source	Permit Status	Annual Quantity ac-ft	Annual Quantity, mgd	Maximum Diversion Rate cfs	Maximum Diversion Rate mgd
DG-001	02/03/99	Wells 3 and 4	Vested	774.00	0.69	1.78	1.15
2019-A	02/03/99	Well 7	Appropriated	652.00	0.58	1.34	0.87
9811	02/03/99	Well 5	Appropriated	307.00	0.27	0.82	0.53
26315	02/02/99	Well 6	Appropriated	443.65	0.39	0.71	0.46
26315	02/02/99	Well 8	Appropriated	414.72	0.37	0.75	0.48
Total				2082.75⁽¹⁾	1.86⁽¹⁾	4.40	3.49
⁽¹⁾ Water right number 26315 limits the annual quantity diverted from water rights DG001, 2019-A, 9811, and 26315 to 2082.75 ac-ft/yr.							

2.3 Summary of Water Rights

The new water right (No. 44954) includes a provision that limits the total water diverted under the existing surface water right, existing groundwater rights, and the new surface water right to the maximum annual volume of 8,152 million gallons (22.3 mgd) and the maximum diversion rate of 31,202 gpm (44.9 mgd).