INTER-BASIN WATER TRANSFERS

INDIVIDUAL PERMIT APPLICATIONS

RENEWAL OF INTER-BASIN WATER TRANSFER PERMITS

PERMIT NO. IWT000009 PERMIT NO. IWT000010 PERMIT NO. IWT000011

FOR THE

WITHDRAWING SYSTEM: CITY OF CROSSVILLE

MAY 2020

1. General Information

The withdrawing system City of Crossville, Cumberland County, Tennessee is currently permitted under the authority of the Tennessee Inter-basin Water Transfer Act of 2000 to transfer water out of a river basin into another river basin as authorized by the following three permits issued by the Tennessee Department of Environment and Conservation, Division of Water Resources:

- Inter-basin Water Transfer Permit No. IWT000009 authorized the transfer of up to 25,000 gallons per day (0.025 million gallons per day) from the Upper Tennessee-Clinch/Emory River Basin into the Lower Tennessee-Hiwassee River Basin,
- Inter-basin Water Transfer Permit No. IWT000010 authorizes the transfer of up to 3.5 million gallons per day from the Upper Cumberland River Basin into the Upper Tennessee-Clinch/Emory River Basin, and
- Inter-basin Water Transfer Permit No. IWT000011 authorizes the transfer of up to 5.0 million gallons per day from the Upper Tennessee-Clinch/Emory River Basin to the Upper Cumberland River Basin.

All three of these permits expire on May 31, 2020. This application constitutes the information required in a permit application as established at Rules of the Tennessee Department of Environment and Conservation, Division of Water Resources Chapter 0400-40-13-.03(1) for the renewal of all three of these permits.

2. <u>Information Required in the Permit Applications</u>

- a) The volume of the proposed withdrawal and the proposed transfer stated in gallons per day that the applicant seeks to be authorized
 - Permit No. IWT000009
 25,000 gallons per day
 - Permit No. IWT000010
 3,500,000 gallons per day
 - Permit No. IWT000011
 5,000,000 gallons per day

b) Identification of all of the withdrawal, return and transfer points

Permit No. IWT000009

Water is withdrawn from the Lake Holiday reservoir through the Lake Holiday Water Treatment Plant raw water intake and transferred to portions of the Grandview Utility District service area through the City of Crossville and Grandview Utility District water distribution systems.

Permit No. IWT000010

Water is withdrawn from the Meadow Park Lake reservoir through the Meadow Park Lake Water Treatment Plant raw water intake and transferred to portions of the South Cumberland Utility District service area, portions of the old Catoosa Utility District service area (now part of the City of Crossville water system) and portions of the City of Crossville service area through the City of Crossville, South Cumberland Utility District and old Catoosa Utility District water distribution systems.

Permit No. IWT000011

Water is withdrawn from the Lake Tansi reservoir through a raw water intake owned by the City of Crossville and transferred either into the Meadow Park Lake reservoir or directly into the Meadow Park Lake Water Treatment Plant at the discretion of the City of Crossville.

- c) The volume of water that will be returned to the basin of origin or a downstream basin
 - Permit No. IWT000009 None
 - Permit No. IWT000010
 None. The transfer volume permitted is considered a net transfer volume.
 - Permit No. IWT000011
 None

d) The peak capacity of each major component in the proposed withdrawal and transfer facilities

Permit No. IWT000009

The projected annual average transfer rate in year 2020 is 9,000 gallons per day. A peak transfer rate of 25,000 gallons per day is considered prudent.

Permit No. IWT000010

The projected annual average transfer rate in year 2020 is 2,470,000 gallons per day. A peak transfer rate of 3,500,000 gallons per day is considered prudent.

Permit No. IWT000011

The peak capacity of the Lake Tansi raw water transfer intake is 7,200,000 gallons per day. A peak transfer rate of 5,000,000 gallons per day is considered adequate.

- e) Engineering and economic justification for the capacity of each major component of the proposed withdrawal and transfer facilities
 - Permit Nos. IWT000009, IWT000010 and IWT000011

All major components of all withdrawal and transfer facilities currently exist and have been in operation for at least 10 years. The engineering and economic justification for these facilities is established by their successful and necessary use.

- f) An assessment of the hydraulic and environmental impacts of the withdrawal on the losing river
 - Permit Nos. IWT000009, IWT000010 and IWT000011

The permitted withdrawals have been in effect for at least 10 years. The hydraulic and environmental impacts of the withdrawals on the losing rivers have been negligible.

- g) An engineering, environmental and economic assessment of the feasibility of utilizing alternative water sources by the water system in the receiving basin
 - Permit Nos. IWT000009, IWT000010 and IWT000011

All of the water transfer activities authorized under these permits have occurred for at least 10 years. Alternative water source analyses were or should have been considered during previous permit applications.

- h) A listing of conservation programs occurring or practices occurring or proposed of the system in the receiving river basin
 - Permit Nos. IWT000009, IWT000010 and IWT000011

The City of Crossville supports water conservation in Cumberland County by code enforcement of the 2012 International Plumbing Code. The Code requires each fixture to have a maximum flow rate. This code is enforced on all new building structures throughout the entire County and all remodel structure projects inside the Crossville City limits.

- i) The proposed date upon which the water transfer is to commence
 - Permit Nos. IWT000009, IWT000010 and IWT000011

All of the water transfer activities authorized by these permits have been occurring for at least 10 years. This is an application to renew these authorizations.

- j) The purpose and justification for the proposed transfer
 - Permit Nos. IWT000009, IWT000010 and IWT000011

All of the water transfer activities authorized by these permits have been occurring for at least 10 years. The City of Crossville water system and its wholesale water customers cannot operate safely and successfully without the water transfers authorized by these permits.

k) Any other appropriate information deemed necessary by the Commissioner for review of the proposed transfer

Permit No. IWT000009

The City of Crossville desires that the transfer of water of up to 25,000 gallons per day authorized by the current version of this permit be incorporated into the renewal permit.

Permit No. IWT000010

The City of Crossville desires that the transfer of water of up to 3.5 million gallons per day authorized by the current version of this permit be incorporated into the renewal permit.

Permit No. IWT000011

The City of Crossville desires that the transfer of water of up to 5.0 million gallons per day authorized by the current version of this permit be incorporated into the renewal permit.

3. Signature Required for a Municipality

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and that based on my inquiry of these persons immediately responsible for obtaining the information contained in this application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name: Greg Wood Title: City Manager

City of Crossville, Tennessee

4. <u>Application Fees</u>

- Permit No. IWT000009 \$250.00
- Permit No. IWT000010 \$7,000.00
- Permit No. IWT000011 \$10,000.00