

**SECTION .0800 - HYDROPNEUMATIC STORAGE TANKS RULES**

**15A NCAC 18C .0801 CAPACITIES: DETERMINING MINIMUM EFFECTIVE VOLUME**

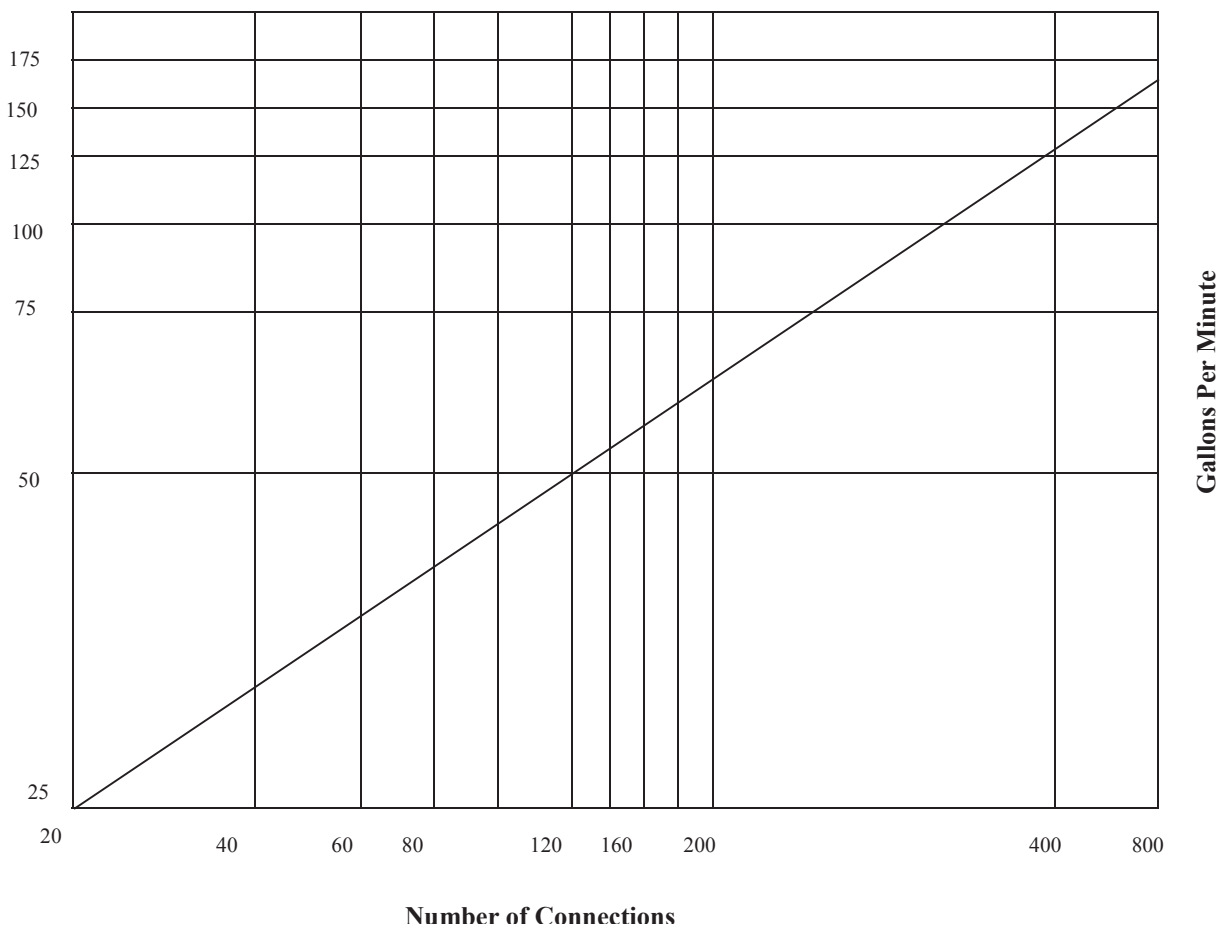
The minimum effective volume of pressure tanks, in gallons, shall equal the peak demand, in gallons per minute, minus the pumping capacity (gpm), multiplied by 20.

*History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977; Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.*

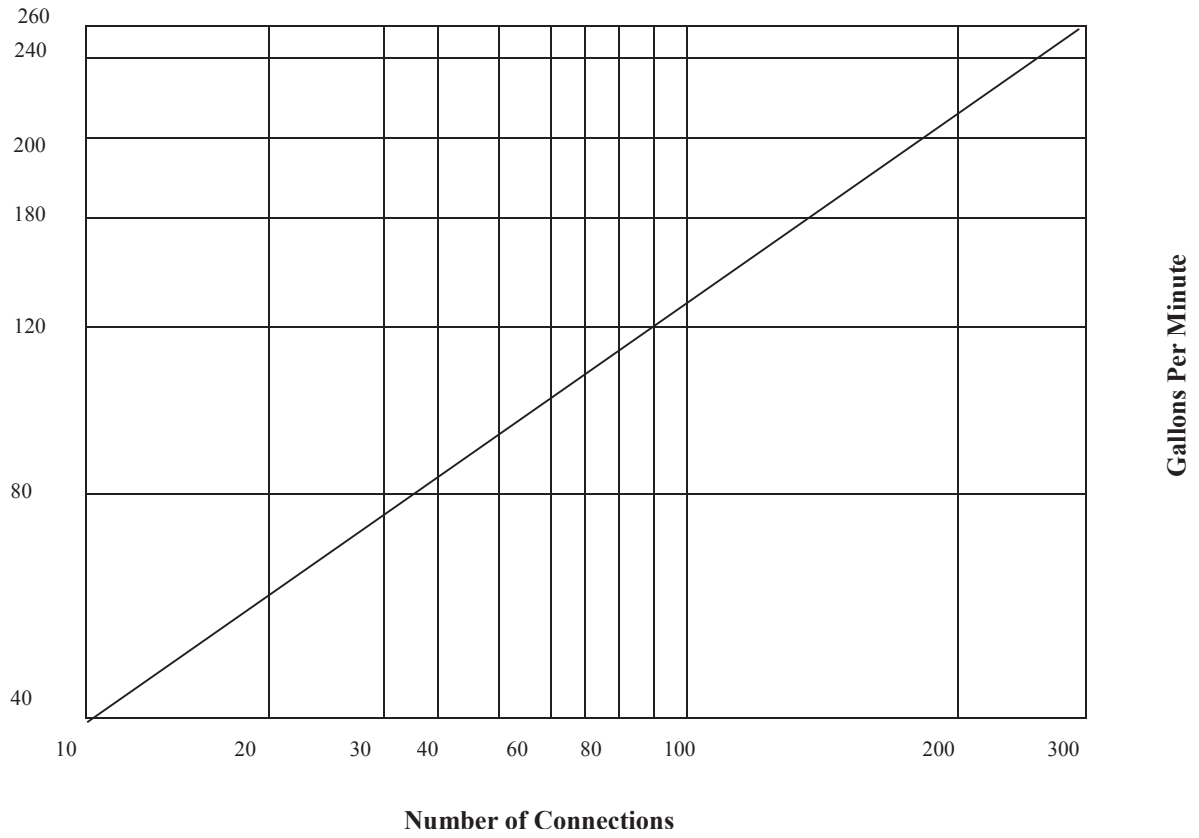
**15A NCAC 18C .0802 CAPACITIES: DETERMINING PEAK DEMAND**

(a) The following charts shall be used to determine the peak demand for campground, residential community, and mobile home park water systems:

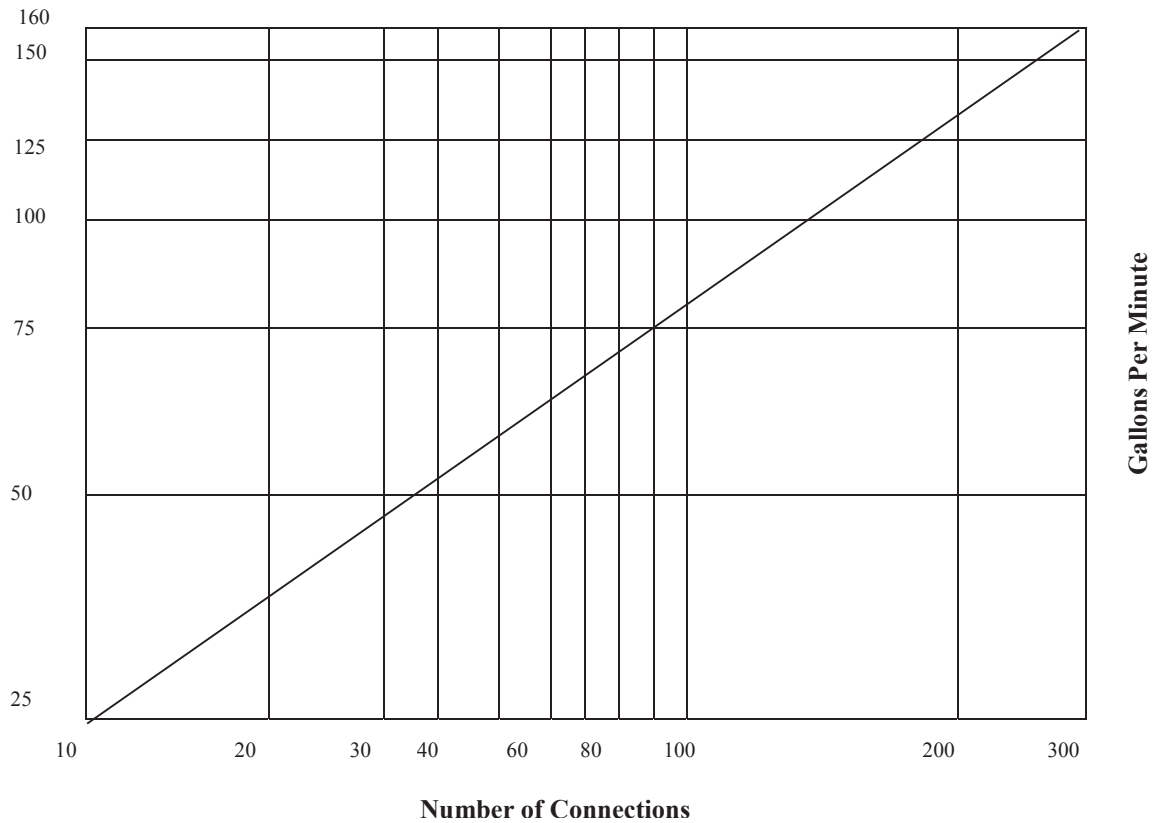
**PEAK DEMAND FOR CAMPGROUND WATER SYSTEMS**  
(Number of Connections vs Gallons per Minute)



PEAK DEMAND FOR RESIDENTIAL COMMUNITY WATER SYSTEMS  
(Number of Connections vs Gallons per Minute)



PEAK DEMAND FOR MOBILE HOME PARK WATER SYSTEMS  
(Number of Connections vs Gallons per Minute)



(b) The peak demand for non-transient, non-community water systems shall be determined based on the total demand weight of fixtures in accordance with the procedures of the North Carolina State Building Code, Volume II, Plumbing Section that are hereby incorporated by reference including any subsequent amendments and editions. Copies are available for public inspection as set forth in Rule .0102 of this Subchapter.

*History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;  
Eff. January 1, 1977;  
Readopted Eff. December 5, 1977;  
Amended Eff. April 1, 2014; July 1, 1994; June 30, 1980;  
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff.  
November 23, 2015.*

#### **15A NCAC 18C .0803 CAPACITIES: DETERMINING TOTAL VOLUME**

The total volume of a pressure tank shall be calculated by using the principle of Boyle's Law. The total volume (gallons) shall be not less than 25 times the number of connections or 500 gallons, whichever is greater for a mobile home park. In the case of a residential community (community water system) the total volume shall not be less than 40 times the number of connections or 500 gallons, whichever is greater. In the case of campgrounds, the total volume shall not be less than 10 times the number of connections or 500 gallons, whichever is greater.

*History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;  
Eff. January 1, 1977;  
Readopted Eff. December 5, 1977;  
Amended Eff. July 1, 1994; March 31, 1980.*

#### **15A NCAC 18C .0804 CAPACITIES: GROUND STORAGE PLUS HYDROPNEUMATIC TANKS**

When ground level storage tanks and high-service pumps are to be used, hydropneumatic tanks shall be sized in relation to peak demand and the high-service pump capacity.

*History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;  
Eff. January 1, 1977;  
Readopted Eff. December 5, 1977;  
Amended Eff. July 1, 1994;  
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff.  
November 23, 2015.*

#### **15A NCAC 18C .0805 CAPACITIES: ELEVATED STORAGE**

(a) Where feasible, elevated storage capacity shall meet the requirements of the ISO Commercial Risk Services, Inc. Fire Suppression Rating Schedule that are hereby incorporated by reference including any subsequent amendments and editions. Copies are available for public inspection as set forth in Rule .0102 of this Subchapter.

(b) The elevated storage capacity for a municipality shall be sufficient to minimize the effect of fluctuating demand and provide a reserve for fire protection, but not be less than 75,000 gallons in capacity.

(c) The combined elevated and ground storage capacity of the finished water for community and non-transient, non-community water systems shall be a minimum of one-half day's supply of the average annual daily demand.

*History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523;  
Eff. January 1, 1978;  
Amended Eff. April 1, 2014; July 1, 1994;  
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff.  
November 23, 2015.*