	Cubic feet.
The down fall water on 50 square miles, at 29 2-10 inches per annum	3,391,872,000
Deduct 3-5ths consumed by the valley	2,035,123,200
Leaves 2-5ths collected in the reservoir	1,356,748,800
Deduct loss for a mean surface of 300 acres, at 15 1-6th feet per annum	198,198,000
Reservoir could furnish to canal, if it caught all the drainage	1,158,550,800
Add running supply of Town creek, the minimum flow being 186 cubic feet per minute per annum	64,281,600
Supply Town creek could furnish annually	1,222,832,400

A feeder introduced upon the 67th level, at Town creek, would have to feed up to the South Branch, and down to dam No. 6, in all 30½ miles. This length of canal would require for one season, or 8 months navigation, (bearing in mind that all the lockage water comes from Cumberland,) as follows:

	Cubic feet.
To fill the canal trunk and its widenings in the Spring, say	50,000,000
Leakage, evaporation, filtration, &c. in 30½ miles, at the rate of 100 cubic feet per mile and per minute	1,054,080,000
Demand of water for one season	1,104,080,000

To recapitulate:

	Cubic feet.
Supply of water per annum, available from Town creek in the driest seasons, as above given	1,222,832,400
Demand of water for one season's navigation	1,104,080,000
Surplus	118,752,400

From these calculations it would appear that if the whole drainage of Town creek could be laid by during the wet months for use in the dry ones, there would be, in the very driest seasons, an abundant supply of water for the use of the 30½ miles of canal. And this treasuring up of the winter