

United States - To the Erie Canal with its 40 feet width and 8 feet depth now  
improper of enlargement to 70 feet width and 12 feet depth - originally with  
single locks now in part with double locks, which will soon be the case along  
its whole line - considering that this enlargement has been called for by the  
public within less than 12 years after the completion of the Canal - and when  
we look further to the past great increase of the Western trade and to its still  
greater anticipated advancement we do not feel justified in assuming as the  
basis of our calculations less than a double set of Locks in constant use.

With these elements of calculation, the daily consumption of water will  
be nearly 3,800,000 cubic feet - and it is this amount furnished daily  
during 300 days of the year that we have considered throughout this Report  
as the due supply of water.

With reference to the extent of Country that will supply this  
amount of water we have already said, and we now repeat, that as favour-  
able, if not the most favourable spring Summit than can be had will  
barely furnish a little more than one third of the quantity.

It may perhaps be said that in 1823 the Commissioners appointed  
by the State of Maryland to survey the same ground pronounced upon the  
practicability of the Linganow route (lower Summit) and that they speak  
with confidence of the sufficiency of water. In answer to this we reply  
that about the same time (1822 or 1823) the Union Canal was  
planned and commenced with reservoirs then considered ample to supply  
the Summit with water and to pass one hundred boats daily. That Canal  
has been finished and is now in use - and with 25 boats passing daily  
with Locks 75 feet long - 8 1/2 feet wide & 2 1/2 feet lift, then reservoirs for  
the three summer months furnish less than 1/10 of the water required -  
the greater part of the remaining 9/10 being forced up with steam engines  
and water wheels, 96 feet into a feeder upwards of 23 miles long (a small  
portion is pumped up 32 feet only).

The undersigned believe that with scarcely an exception,  
in Great Britain disappointment has followed, when reservoirs have  
been relied on to furnish a sufficiency of water for active trade.

We will add one other remark before dismissing this  
subject. From an examination of the Report of the United States Engineers  
of 1826 on the Chesapeake & Ohio Canal we find that more than five  
times the extent of Country and more than five times the quantity of  
water can be commanded on the Summit of that Canal thro' the  
Alleghany Mountains than we have on any Summit of Pass-ridge

Satisfied of the impracticability of the several routes, exclu-  
sively within the State of Maryland, submitted to our examination  
from the entire insufficiency of water to feed the Summit we have  
thought it unnecessary to prepare detailed or even general estimates of  
of their cost, but are satisfied that the entire cost of the work even if a  
Sufficien