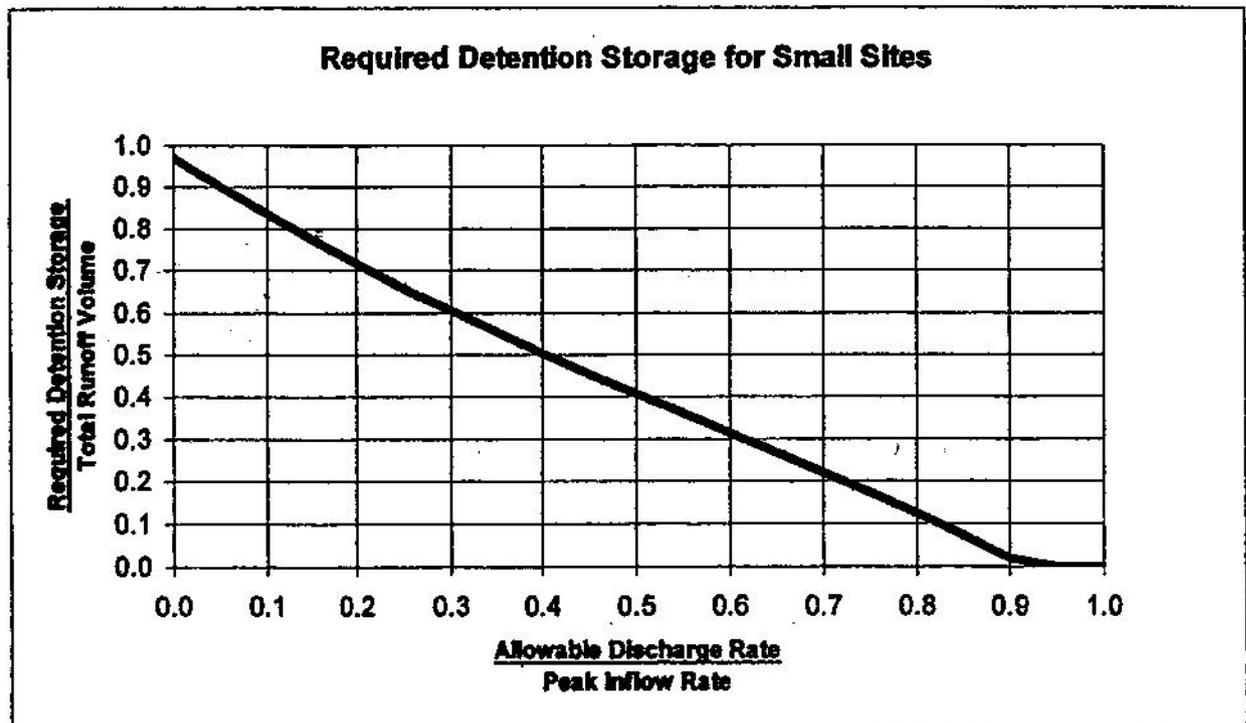


Required Detention Storage for Small Sites
 by Willie Gonwa, P.E., Ph.D.
 Revised: May 28, 2003

Percentage Peak Flow Rate Reduction (Qpre/Qpost)	Required Storage as a Percentage of Runoff Volume for Orifice Outlet
0%	97%
5%	90%
10%	84%
15%	77%
20%	72%
25%	66%
30%	61%
35%	55%
40%	50%
45%	46%
50%	41%
55%	36%
60%	31%
65%	27%
70%	22%
75%	17%
80%	12%
85%	7%
90%	2%
95%	0%
100%	0%



Based on gamma function inflow hydrographs developed by McEnroe in 1992 and referenced in the Stormwater Collection Systems Design Handbook. Larry W. Mays (editor), McGraw-Hill 2001. Table 7.4