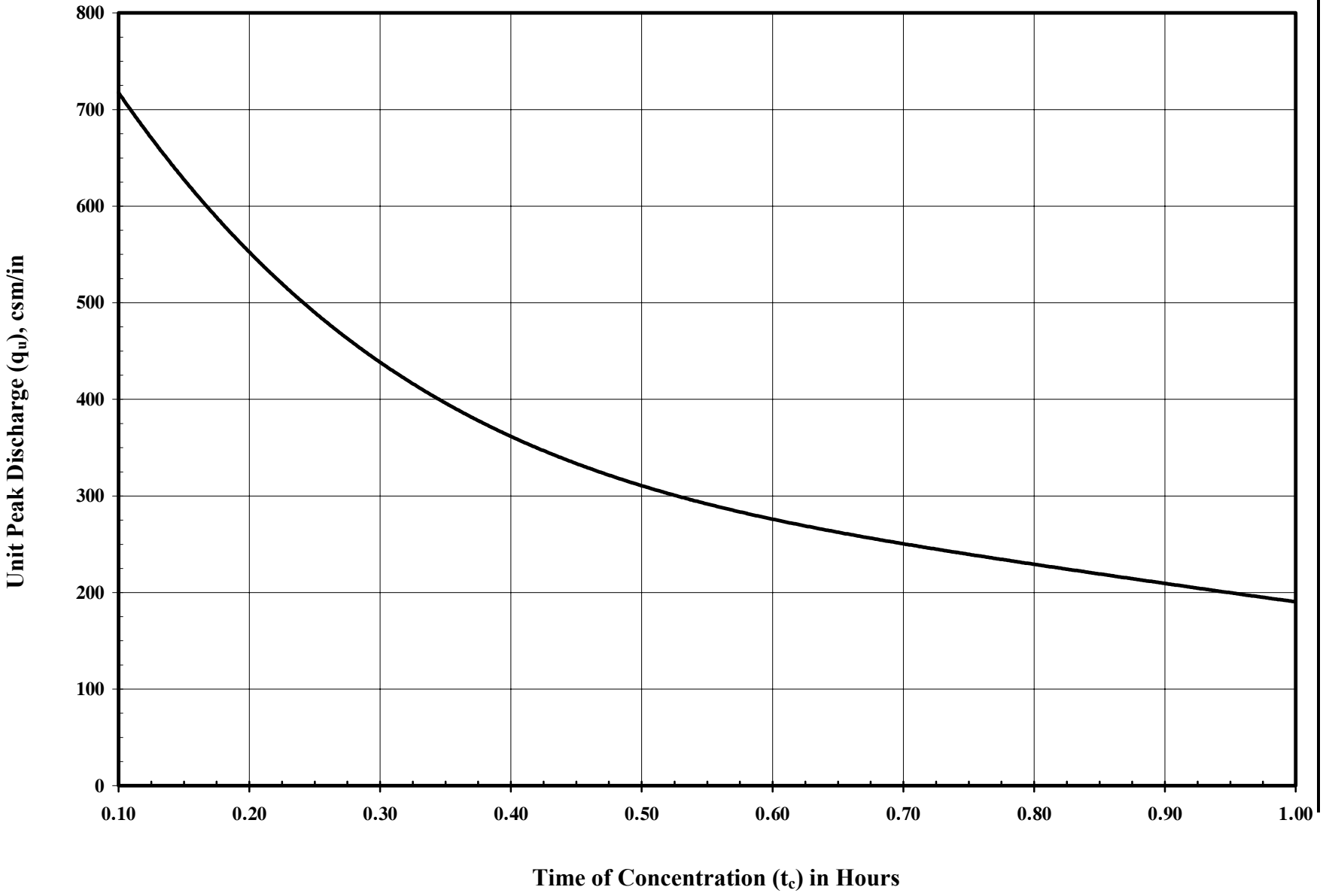
Eastern Shore (Delmarva) Dimensionless Hydrograph

Appendix D.14

Figure D.14.1 **SCS Graphical Method of Determining Peak Discharge (q_u) in csm/in For Delmarva Peninsula**



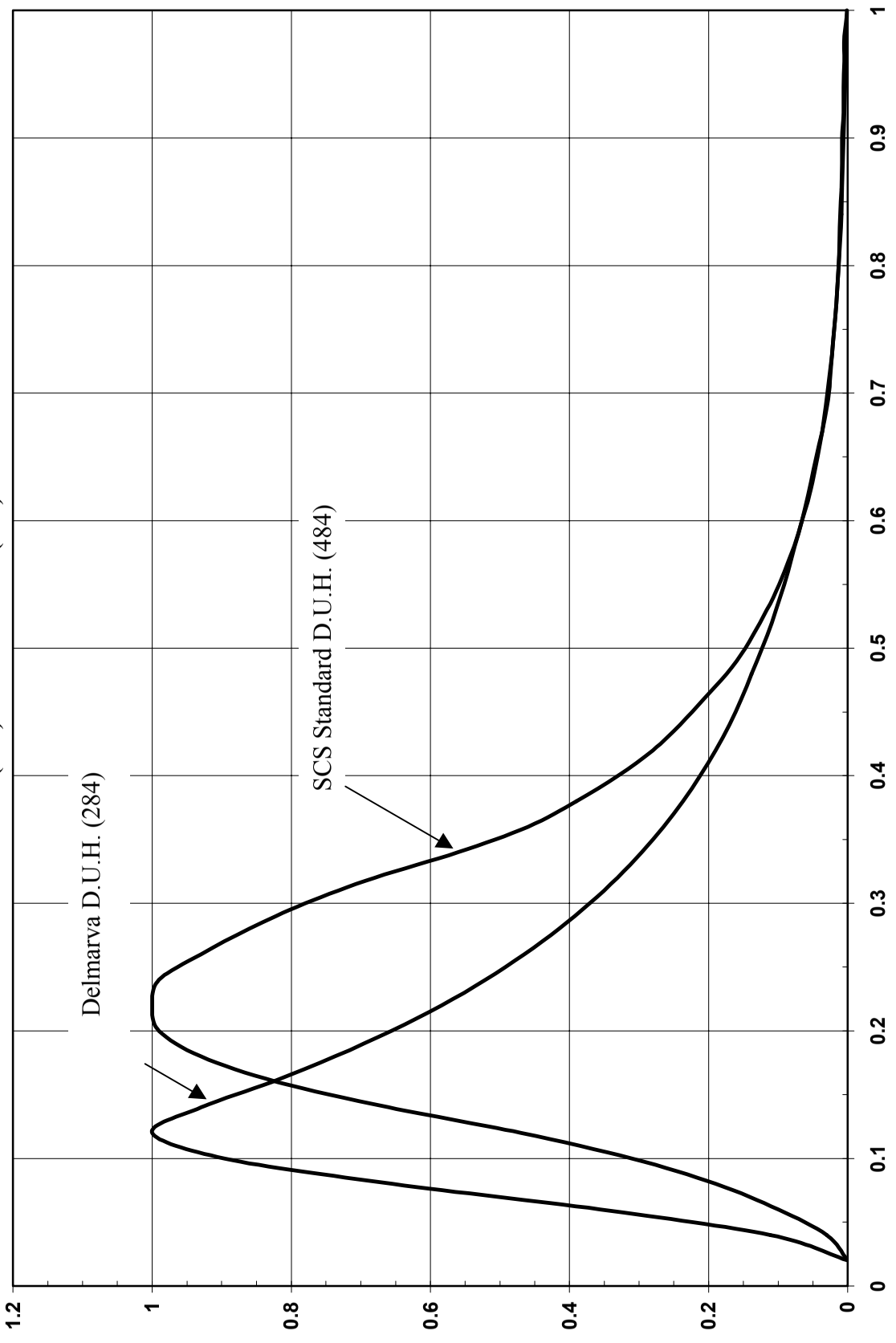

Dimensionless Unit Hydrographs
SCS (484) and Delmarva (284)
Delmarva D.U.H. (284)
SCS Standard D.U.H. (484)
Dimensionless Rate of Flow
Dimensionless Time Increment
0
0.2
0.4
0.6
0.8
1
1.2
0.1
0.3
0.5
0.7
0.9

Figure D.14.2

Table D.14.1 Standard 24-Hour Dimensionless Unit Hydrograph Dimensionless Time Increment = 0.02					
Δt	x.x0	x.x2	x.x4	x.x6	x.x8
0.0	0.0	0.0300	0.100	0.1900	0.31
0.1	0.47	0.66	0.82	0.93	0.99
0.2	1.00	0.99	0.93	0.86	0.78
0.3	0.68	0.56	0.46	0.39	0.33
0.4	0.28	0.241	0.207	0.174	0.147
0.5	0.126	0.107	0.091	0.077	0.066
0.6	0.055	0.047	0.04	0.034	0.029
0.7	0.025	0.021	0.018	0.015	0.013
0.8	0.011	0.009	0.008	0.007	0.006
0.9	0.005	0.004	0.003	0.002	0.001
1.0	0.0	0.0	0.0	0.0	0.0
Computed Peak Rate Factor = 484.00					

Table D.14.2 24-Hour Dimensionless Unit Hydrograph for Use in the Delmarva Peninsula Dimensionless Time Increment = 0.02					
Δt	x.x0	x.x2	x.x4	x.x6	x.x8
0.0	0.0	0.111	0.356	0.655	0.896
0.1	1.000	0.929	0.828	0.737	0.656
0.2	0.584	0.521	0.465	0.415	0.371
0.3	0.331	0.296	0.265	0.237	0.212
0.4	0.190	0.170	0.153	0.138	0.123
0.5	0.109	0.097	0.086	0.076	0.066
0.6	0.057	0.049	0.041	0.033	0.027
0.7	0.024	0.021	0.018	0.015	0.013
0.8	0.012	0.011	0.009	0.008	0.008
0.9	0.006	0.006	0.005	0.005	0.0
1.0	0.0	0.0	0.0	0.0	0.0
Computed Peak Rate Factor = 284.00					