

Table 1

River	Town	Latitude	Longitude	Watershed	Land Use (1°/2°)	Drainage Area (km ²)	Discharge (cfs)	Channel Width (m)
Weweantic	Wareham	41.7662	-70.7461	Buzzards Bay	Residential / Forest	148.2	NA	35.7
Jones	Kingston	41.9960	-70.7233	South Coastal Basin	Residential / Forest	69.3	55.4	27.3
Fore	Braintree	42.2225	-70.9732	Boston Harbor	Urban / Residential	74.7	81.4	13.7
Parker	Newbury	42.7505	-70.9282	Plum Island Sound	Residential / Forest	66.0	82.7	54.8

Table 2

River	Years (No.)	Onset Julian Date	5% Catch Julian Date	50% Catch Julian Date	End Date Julian Date	5% duration (Days)	Duration (Days)	Wt Mean Julian Date	Wt. Mean Temp (°C)	5% Catch (°C)	50% Catch (°C)	Duration (°C)
Parker	9	71	73	85	114	42	45					
Fore	20	65	78	98	130	52	66	99	10.36	5.83	10.19	9.43
Jones	20	64	71	95	127	57	64	95	9.70	5.64	9.69	9.11
Weweantic	7	81	82	99	114	33	35					

Table 3

Selected Model - Coefficients & VIF - Jones River (Table A)											
Variable	Estimate	Std_Error	Z_value	P_value	Significance	Rate_Ratio	CI_Lower	CI_Upper	Percent Change	VIF	VIF_Status
Intercept	158.970	24.340	6.531	6.52E-11	***	1.096E+69	2.095E+48	5.74E+89	1.1E+71	N/A	N/A
year	-0.079	0.012	-6.501	7.99E-11	***	0.924	0.903	0.947	-7.6	1.11	OK
doy_c	-0.043	0.004	-10.527	6.46E-26	***	0.957	0.95	0.965	-4.3	1.83	OK
doy2	-0.002	0.000	-14.468	1.94E-47	***	0.998	0.997	0.998	-0.2	1.04	OK
river_discharge_scaled	-0.241	0.064	-3.77	0.000163	***	0.786	0.694	0.891	-21.4	1.09	OK
amplitude_scaled	0.241	0.075	3.204	0.00136	**	1.273	1.098	1.475	27.3	1.48	OK
flood_sin_scaled	0.184	0.078	2.344	0.0191	*	1.202	1.031	1.401	20.2	1.56	OK
flood_cos_scaled	-0.071	0.081	-0.882	0.378		0.931	0.795	1.091	-6.9	1.71	OK
temp_diff_scaled	0.310	0.084	3.687	0.000227	***	1.363	1.156	1.608	36.3	1.83	OK
Selected Model - Coefficients & VIF - Fore River (Table B)											
Variable	Estimate	Std_Error	Z_value	P_value	Significance	Rate_Ratio	CI_Lower	CI_Upper	Percent Change	VIF	VIF_Status
Intercept	-50.425	21.897	-2.303	0.0213	*	0	0	0.001	-100	N/A	N/A
year	0.027	0.011	2.436	0.0149	*	1.027	1.005	1.049	2.7	1.02	OK
doy_c	-0.022	0.004	-5.804	6.48E-09	***	0.979	0.972	0.986	-2.1	1.83	OK
doy2	-0.003	0.000	-22.522	2.5E-112	***	0.997	0.996	0.997	-0.3	1.05	OK
river_discharge_scaled	0.181	0.060	3.017	0.00255	**	1.198	1.065	1.348	19.8	1.11	OK
amplitude_scaled	-0.151	0.058	-2.579	0.0099	**	0.86	0.767	0.964	-14	1.04	OK
temp_diff_scaled	0.371	0.078	4.74	2.13E-06	***	1.448	1.243	1.688	44.8	1.85	OK