

Total Lot area	43,560.00	s.f.	1 Acre = 43,560 s.f.
Number of bedrooms:	5		
Total lawn area:	14,000.00	s.f	
Total natural area:	39,860.00	s.f	
Total paved surface area:	600.00	s.f	
Total roof area:	3,100.00	s.f.	
Average annual precipitation:	48.00	inches/year	48"/yr in Hingham average from 1961-2019
Lawn fertilization rate:	3.00	(pounds/1000 s.f./year)	Fertilizer application positively correlated with household income
Amount of fert. That reaches GW	0.25	% of total	25% leaching rate of in all nitrogen loading analysis
Infiltration rate for lawn/natural area:	0.45	% of total	21.6" (1.8')/yr recharged from precipitation
N conc. In T5 wastewater	35.00	mg/L	Nitrogen reaching groundwater
N conc. In recharge (pervious)	1.50	mg/L	Nitrogen reaching groundwater in recharge off pavemt (90% of 48"/y)
N conc. In recharge (impervious)	0.75	mg/L	Nitrogen reaching groundwater in recharge off roofs (90% of 48"/y)

RECHARGE:

Title V:	2,081.75	L/d
Roof area:	861.88	L/d
Paved surfaces:	166.82	L/d
Natural areas:	5,566.86	L/d
TOTAL RECHARGE:	8,677.31	L/d

NITROGEN ADDITIONS:

Title V:	72,861.25	mg/d
Roof area:	646.41	mg/d
Pavement areas	250.22	mg/d
Lawn area:	13,060.27	mg/d
TOTAL NITROGEN ADDITION:	86,818.16	mg/d

RESULTING NITRATE CONCENTRATION: **10.01** mg/L