

PROJECT LOCATION
DATE
APPLICANT
NAME OF DEVELOPMENT ON SITE PLAN

LOADING ASSUMPTIONS

A1	Wastewater Effluent from a Standard On-Site System	35 mg/L
	Wastewater Effluent from a DEP Approved Denitrification System	19 mg/L
	Wastewater Effluent from a Centralized Wastewater Treatment Facility	10 mg/L
A2	Runoff from Rooftops	0.75 mg/L
A3	Runoff from Roadways and Driveways	1.5 mg/L
A4	Turf Application	3.0 lbs/year/1,000 sq feet
A5	Nitrogen leaching rate from turf	25%
A6	Rainfall (Runoff on natural surfaces)	0.05 mg/L

RECHARGE ASSUMPTIONS

	NRCS Hydrologic Soils Group	Recharge Rate
B1	A Soils	24 inches per year
	B Soils	18 inches per year
	C Soils	10 inches per year
	D Soils	3 inches per year
	Wetlands and Surface Waters	0 inches per year

NITROGEN SOURCES

C1	Total Residential Wastewater Flow (Actual Title 5)		gpd
	Total Residential Wastewater Flow (Modified Title 5)		gpd
	Total Non-Residential Wastewater Flow (Title 5)		gpd
	Total Non-Residential Wastewater Flow (Measured)		gpd
C2	Area of Roofs		
	A Soils		square feet
	B Soils		square feet
	C Soils		square feet
	D Soils		square feet
C3	Area of Roadways and Driveways		
	A Soils		square feet
	B Soils		square feet
	C Soils		square feet
	D Soils		square feet

C4	Area of Turf		
	A Soils		square feet
	B Soils		square feet
	C Soils		square feet
C5	D Soils		square feet
	Natural Area		
	A Soils		square feet
	B Soils		square feet
C6	C Soils		square feet
	D Soils		square feet
Total Site Area			square feet

RECHARGE VOLUMES FROM IMPERVIOUS SURFACES

D1	Roofs		gallons per year	Roof Area x Recharge Rates for Underlying Soil Types (C2 x B1)
D2	Roadways and Driveways		gallons per year	Roadways and Driveways Area x Recharge Rates for Underlying Soil Types (C3 x B1)
D3	Alternative Calculation in Redevelopment Scenario		gallons per year	
D4	Total		gallons per year	

RECHARGE VOLUMES FROM PERVIOUS SURFACES

E1	Turf		square feet	Turf Area x Recharge Rates for Underlying Soil Types (C4 x B1)
E2	Natural Areas		square feet	Natural Area x Recharge Rates for Underlying Soil Types (C5 x B1)
E3	Total		square feet	

LOADING CALCULATION

F1	Load from Wastewater		lbs N per year	Wastewater Flow x N Concentration in Wastewater (C1 x A1)
F2	Load from Rooftops		lbs N per year	Volume of Recharge from Roof Runoff x N Concentration in Roof Runoff (D1 x A2)
F3	Load from Roadways and Driveways		lbs N per year	Volume of Recharge from Roadways and Driveways x N Concentration in Roadways and Driveways (D2 x A3)
F4	Load from Turf		lbs N per year	Turf Application Rate x Area of Turf/1,000 x Leaching Rate (A4 x C4/1,000 x A5)
F5	Load from Natural Area		lbs N per year	Volume of Recharge from Natural Areas x N Concentration in Rainfall (C5 x A6)
F6	Total		lbs N per year	

NITROGEN CALCULATION

Final Concentration		mg/L	Total Annual N Load / Total Annual Recharge Volume (F6 / (C1 + D4 + E3))
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