

Equation (1) Inputs	(LxW)/43560sqft	Equation (1) Assumptions
---------------------	-----------------	--------------------------

1 acre = 43560 sqft

Area        Length (ft)        Width (ft) 0.0335 Acres  
**1461 sq ft. (calculated from GIS)**

Equation (2) Inputs	Ksat*27,154gal/(42gal)	Equation (2) Assumptions
---------------------	------------------------	--------------------------

1 acre/inch = 27,154 gal

1 bbl = 42gal

Ksat 4 in Inches per hour located at <https://websoilsurvey.nrcs.usda.gov>  
 (Ksat high at 2.00 to 6.00 in/hr)

2586.10 BBL/Acre/hr

Equation (3)	(Eq2)X(Eq1) Area adjusted volume
--------------	----------------------------------

86.74 BBL/hr max

Equation (4) Inputs	(Eq3)X release duration (hours)+recovered volume	Equation (4) Assumptions
---------------------	--	--------------------------

recovered fluids are not  
in soil solution0 BBL0.5 Duration (hr)43.37 BBL

<sup>1</sup> infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface: (National Soil Survey Handbook (USDA))

<sup>2</sup> (Ksat) Hydraulic Conductivity. (National Soil Survey Handbook (USDA)) conductivity is often referred to as coefficient of permeability, most commonly shortened to permeability



**Souder, Miller & Associates**  
*Engineering ♦ Environmental ♦ Surveying*

201 S. Halagueno ♦ Carlsbad, NM 88220  
 (575) 689-8801 ♦ [www.soudermiller.com](http://www.soudermiller.com)

NRM1935138654