# GIS - Documentation #8762

# Calculation of Run-off volume and Vegetation classification

05/08/2019 11:11 - Giulio Di Anastasio

Status:	New	Start date:	05/08/2019
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour

### Description

As discussed, the formula  $Q = C^*I^*A$  will be instead in the form of  $V = C^*R^*A$ , where Q (flow in the unit of time) is replaced by V (volume of run-off), and I (intensity of rainfall in the unit of time) is replaced by R (Rainfall).

To be able to proceed, we need to use the vegetation classification shapefiles as generated by Selvarani on the raster created using samples created by Pavneet, and incorporate in the calculation parameters like:

- infiltration
- evapotranspiration
- threshold of effective rainfall to generate run-off
- antecedent conditions of the soil wetness
- imperviousness of surfaces (buildings, platforms, roads, etc)

To be updated Giulio

### History

#### #1 - 05/08/2019 17:07 - Giulio Di Anastasio

- Description updated

- Tracker changed from Feature to Documentation

Quick correction: the raster was not created by Pavneet. Pavneet actually made the samples for the classification, but the output raster of the classification has been created by Selvarani. Giulio