# Dissect and dissolve overlaps Ver 0.2 QGis 3.16 LTR

#### WARNING

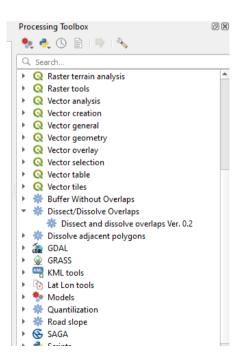
This plugin uses SAGA algorithms. Users must have a version of QGis with SAGA enabled. Latest standalone Long Term Release is recommended (currently Version 3.22 LTR). (1)

#### 1. Introduction

Use this plugin to detect if a polygon layer has two or more features (polygons) overlapping each other. In this case, the plugin can dissect the overlaps into distinct features and dissolve those features into the neighboring feature with the largest area.

## 2. Using the plugin

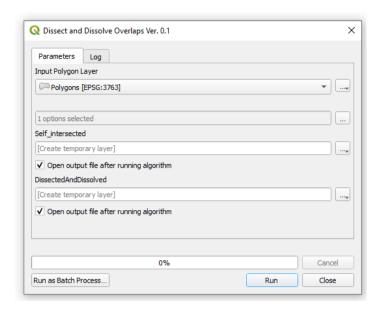
Run the plugin by double clicking *Processing Toolbox -> Dissect/Dissolve Overlaps -> Dissect and dissolve overlaps Ver. 0.1*, like the following image:



This action opens the following plugin parameters window:

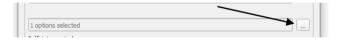
(1) — Older versions of QGis can be downloaded from: https://download.qgis.org/downloads/

## Dissect and dissolve overlaps

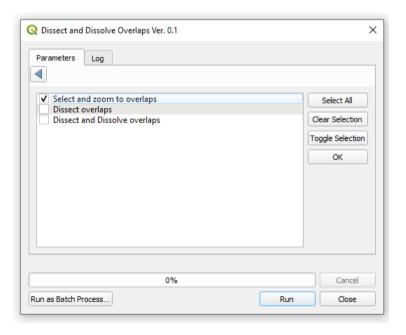


#### Where:

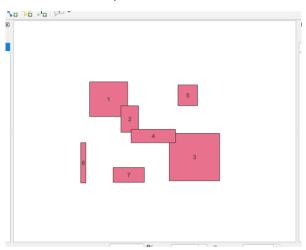
- Input Polygon Layer: user must choose a polygon layer in order to detect if there are overlapping features and, if so, proceed with the following options;
- Options window: to open options window, click on the ellipsis sign:



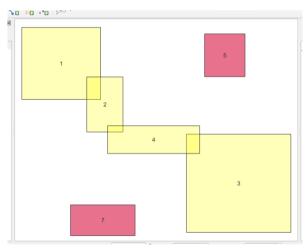
- Options: there are 3 options available:
  - Select and zoom to overlaps (always active);
  - Dissect overlaps;
  - Dissect and dissolve overlaps;



 Select and zoom to overlaps: this option, that is always active, is used to detect if there are overlaps in the input polygon layer; if so, the features that overlap each other are selected, and the canvas zoomed to this selection;



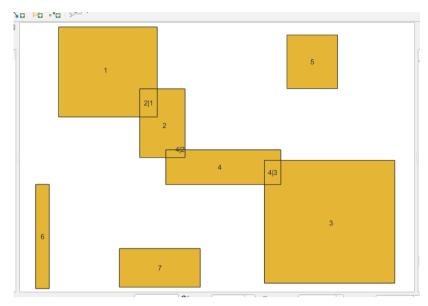
In the above image of the canvas, feature 2 intersects parts of features 1 and 4, and features 3 and 4 intersect each other in part.



In the above image of the canvas, after running the plugin, the intersections of features 1, 2, 3 and 4 are detected, selected and zoomed to them.

- <u>If input polygon layer has no overlaps</u>: in this case, the plugin will issue a message, which will be visible for a period of ten seconds, closing automatically and ending the plugin execution (users should not try to close this window manually!);
- <u>Dissect overlaps</u>: if the previous option detects overlaps, and user have selected this one, the plugin will perform the dissection of the overlaps into distinct features, and will create a new temporary layer, named "Intersection":

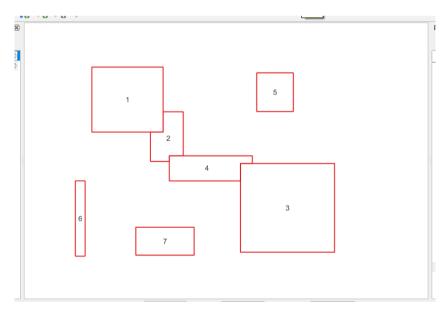
## Dissect and dissolve overlaps



In the above image of the canvas, after running the plugin with the option 2 selected, the intersections of features 1, 2, 3 and 4 are **dissected**, and a new temporary layer were created with 3 new features, with ID = 2|1, 4|2 and 4|3.

This new temporary layer will have a field named "ID", where some features will have ID values like '2|1', for example. This ID value means that this feature was the overlapping area of features ID=1 and ID=2.

 Dissect and dissolve overlaps: with this third option selected, the plugin will dissolve the new features created by the dissection of the overlapping areas, into the neighboring feature with the largest area, and a new temporary layer named "Eliminated" is created:

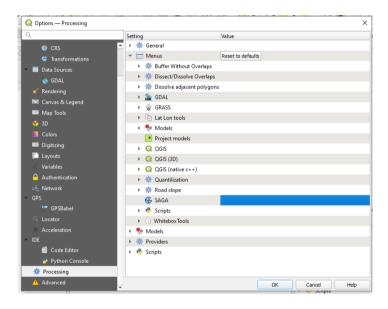


In the above image of the canvas, after running the plugin with the option 3 selected, the intersections of features 1, 2, 3 and 4 are **dissolved**, and a new temporary layer were created with same number of features of input layer.

- <u>Please note</u>: with this third option selected, the <u>dissolve result</u> may not be what users are expecting; in this case, use only the second option (or the first and the second options), <u>that create a temporary polygon layer without overlaps</u>, and then decide what to do.

## 3. Checking if your installation has SAGA

To check if your QGis installation has the SAGA app, open the Processing options, and in "Menus" check if there is a SAGA menu, as in the image below:



If there is a SAGA menu, open the Providers menu and enable SAGA:

