QGIS Application - Bug report #14301

simplification makes geometry-based expression values (such as $area) vary for symbology and labels

2016-02-15 07:06 PM - Mathieu Pellerin - nIRV

Status:	Closed			
Priority:	Normal			
Assignee:				
Category:	Simplification			
Affected QGIS version:	master	**Regression?:**	No	
Operating System:		**Easy fix?:**	No	
Pull Request or Patch supplied:		**Resolution:**		
Crashes QGIS or corrupts data:		**Copied to github as #:**	22292	

Description

When simplification is activated for a given vector layer, geometry-based expression values - such as $area - will vary within a symbology or label context when the zoom level in changed. I haven't looked at the code, but what I'm assuming happens here is that the expression is run against the simplified geometry, leading to varying values as the geometry is morphed.

That's a significant shortcoming that would be worth addressing. I discovered this when a number of polygons were going missing in a project using a density-based expression to make a graduated symbology.

I'm attaching a small test project to this issue that shows a polygon disappearing when zooming out (due to simplified polygon having an erroneous $area value).

Steps to reproduce

1. Open the attached project
2. Notice the rule-based expression being used: ($area / 10000) > 1309 AND ($area / 10000) < 1310
3. Zoom out onto the canvas a couple of times, you'll see the polygon go missing

If you change the symbology to a single symbol, you can zoom in and out and notice the label (which shows the result of the following expression: $area / 10000) value varies as the simplified polygon returns different $area values.

Associated revisions

Revision d4a482b9 - 2016-05-27 04:34 PM - Nyall Dawson

Merge pull request #2900 from ahuarte47/Issue_QPainterSimplification

[Bugfix] QPainter simplification (fixes #14301)

History

#1 - 2016-03-11 03:16 AM - Alvaro Huarte

Hi, I would like to propose this pull [https://github.com/qgis/QGIS/pull/2900] to fix the issue.

Best regards

Alvaro

#2 - 2016-05-27 07:35 AM - Nyall Dawson

- Status changed from Open to Closed

Fixed in changeset commit:"d4a482b982b6748a1812efa0ef075b65bf668ba4".

Files

expression_area_simplification.zip	311 KB	2016-02-15	Mathieu Pellerin - nIRV