Student Presentation

Nearest School Name, distance

By

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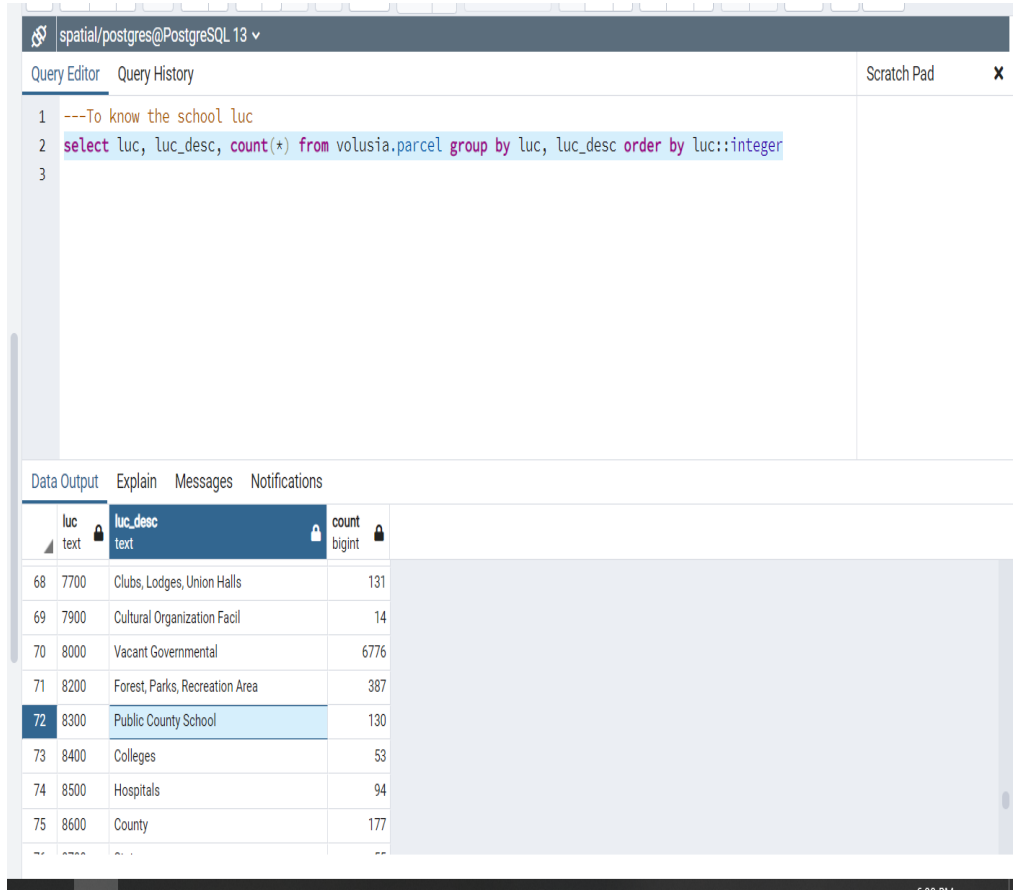
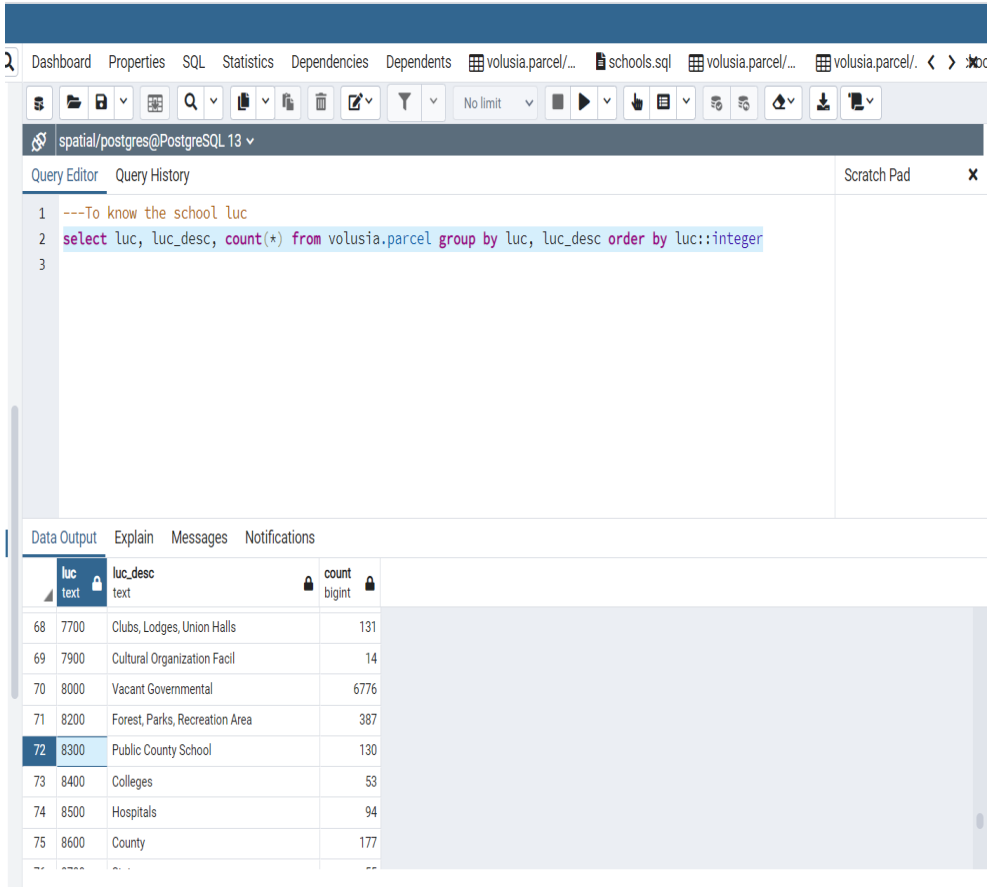
-To know the school luc

select luc, luc_desc, count(*) from volusia.parcel group by luc, luc_desc order by luc::integer

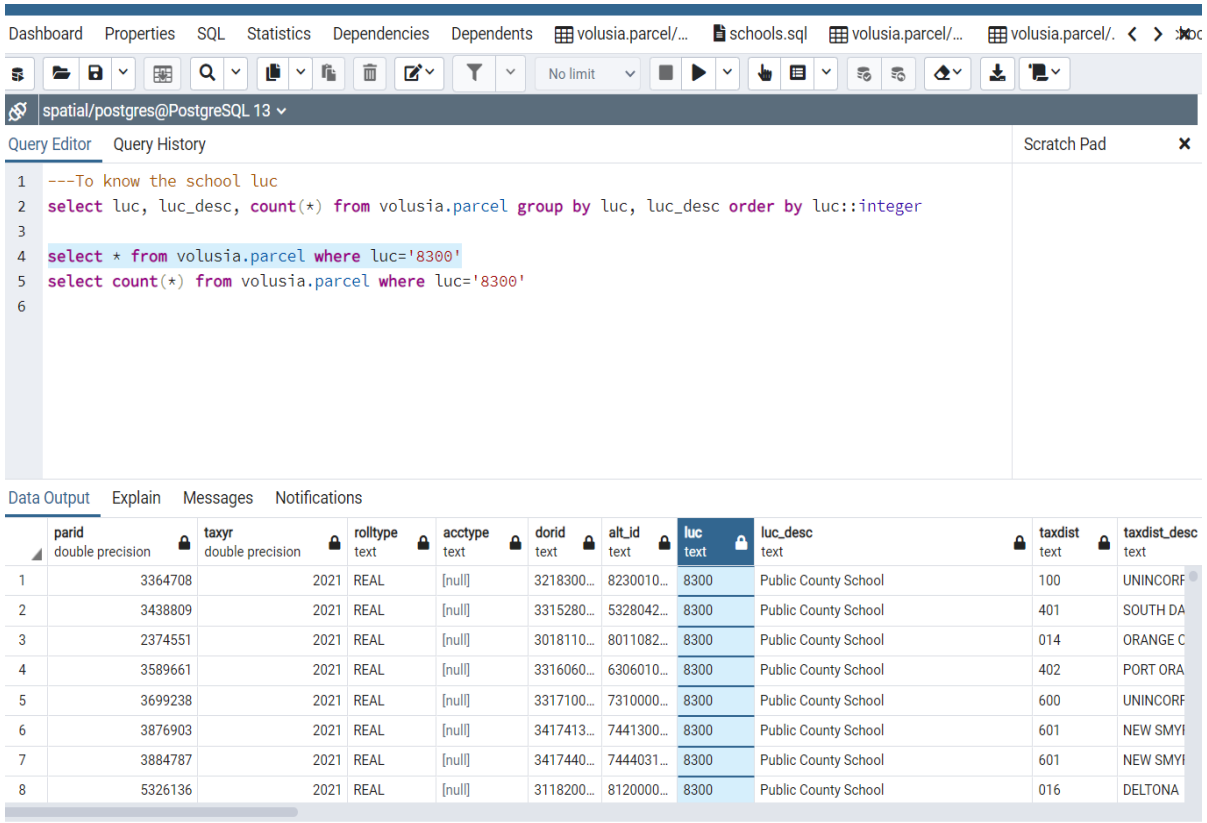


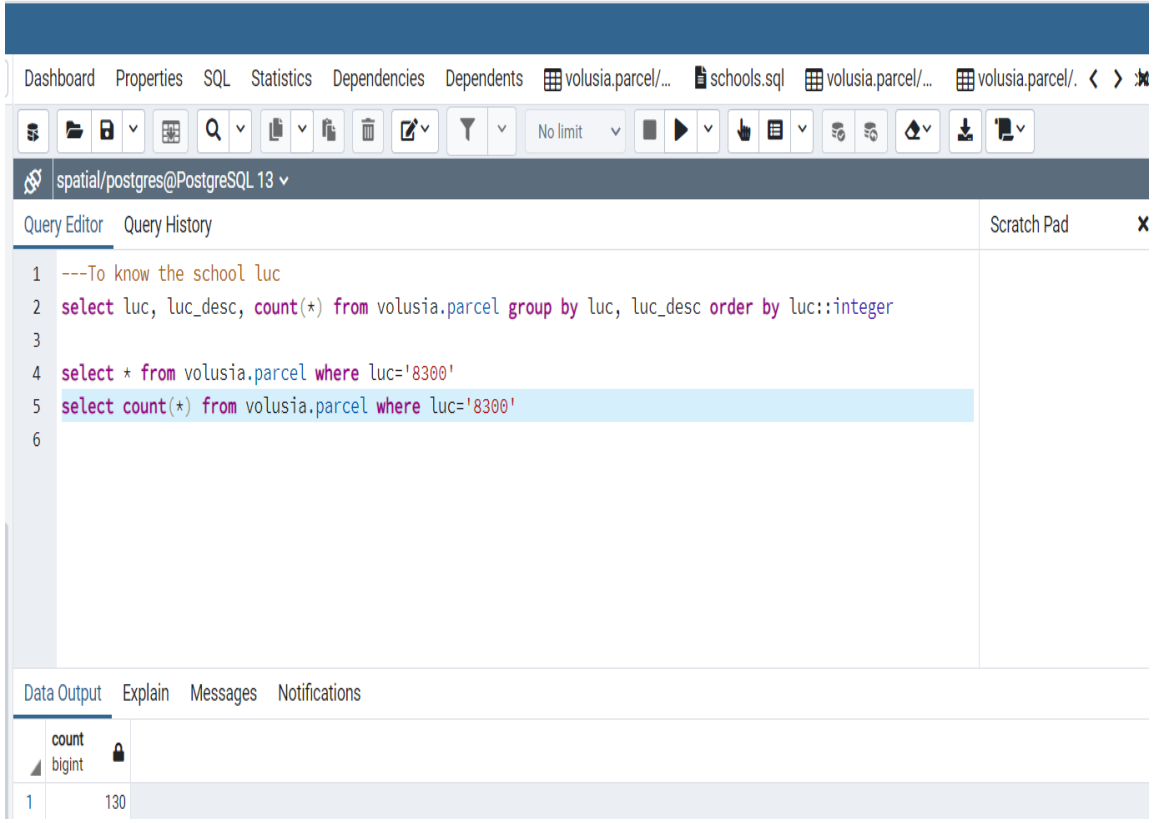


- The school in the county have luc of 8300

select * from volusia.parcel where luc='8300'

select count(*) from volusia.parcel where luc='8300'

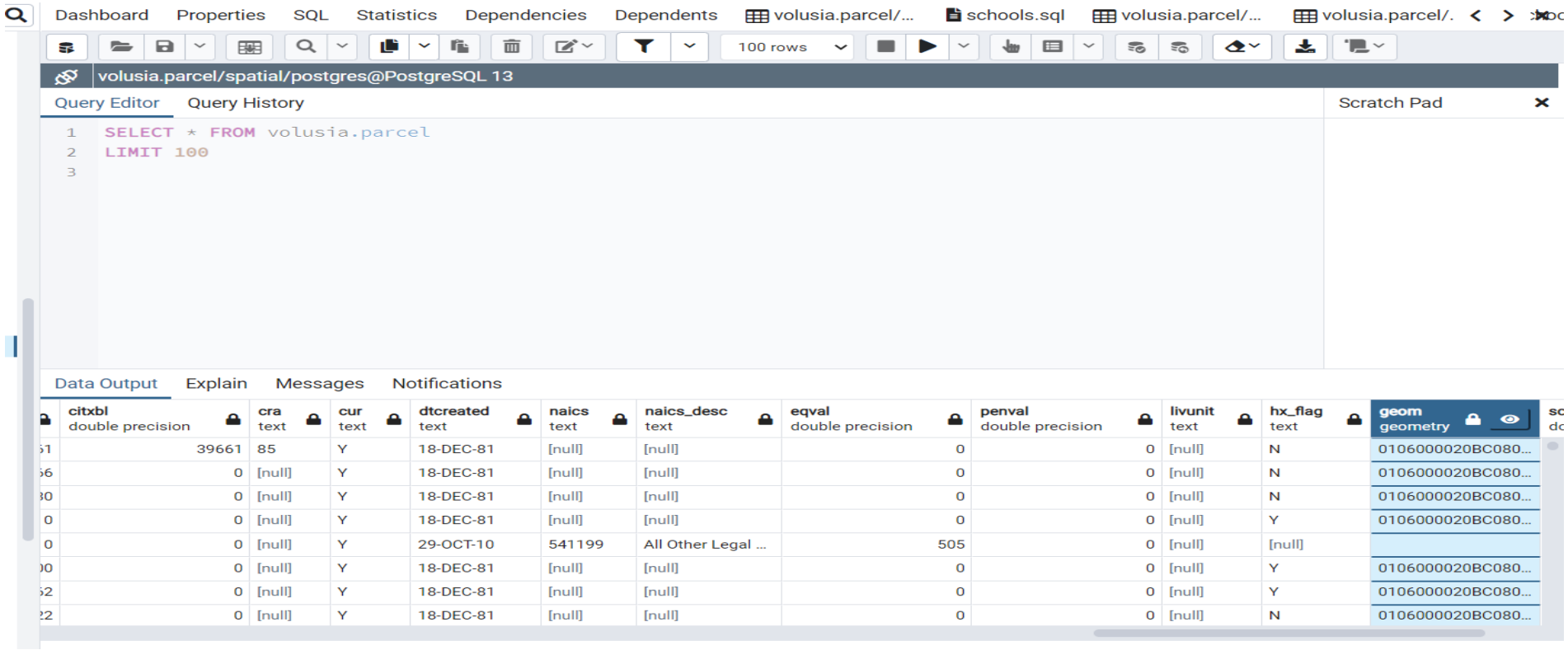




- Add the geometry column to the parcel table and update it

SELECT Add Geometry Column ('volusia','parcel','geom',2236,'MULTIPOLYGON',2);

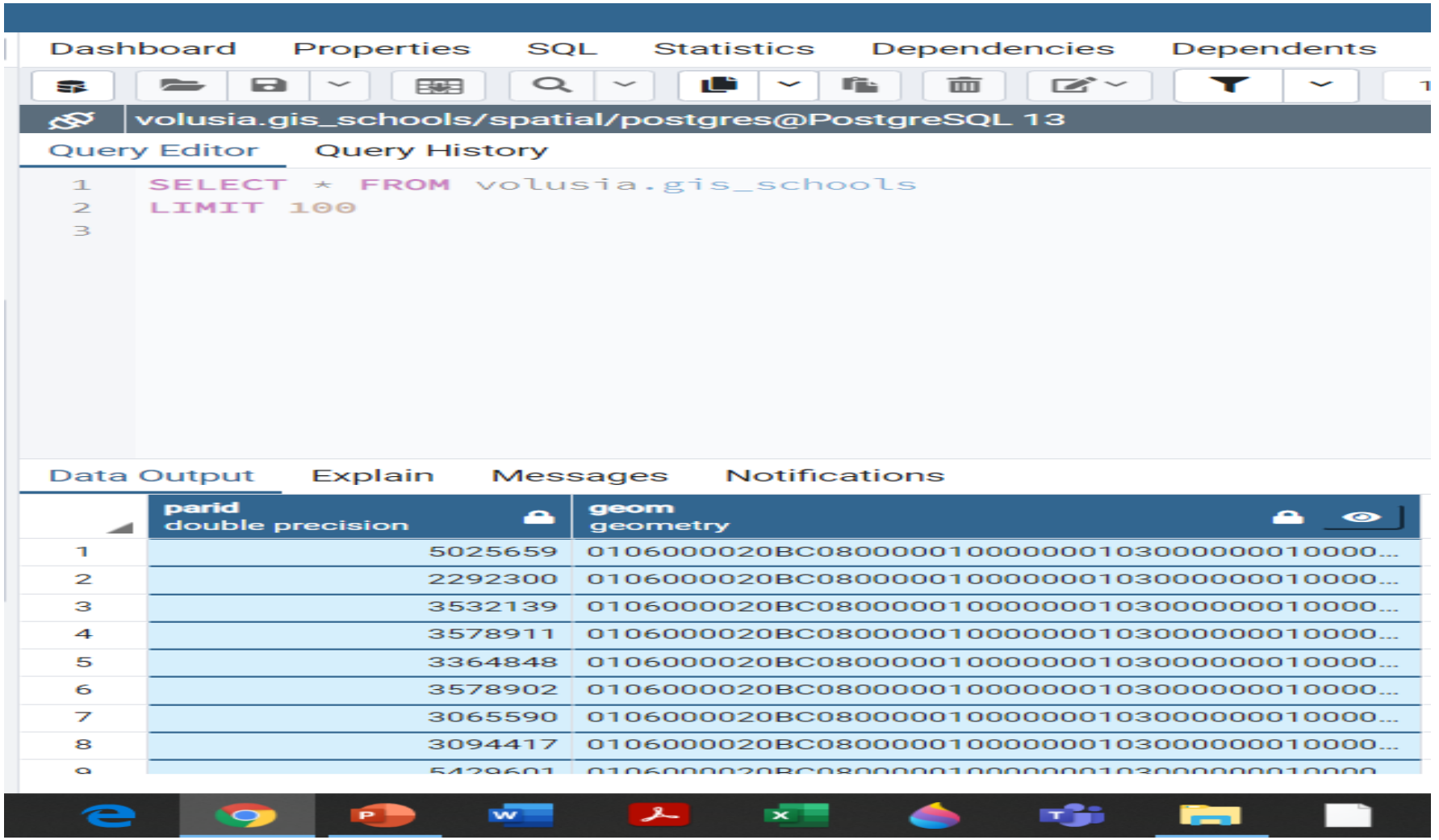
update volusia.parcel a set geom = p.geom from volusia.gis_parcels p where a.parid=p.altkey;



citxbl double precision	cra text	cur text	dtcreated text	naics text	naics_desc text	eqval double precision	penval double precision	livunit text	hx_flag text	geom geometry
39661	85	Y	18-DEC-81	[null]	[null]	0	0	[null]	N	0106000020BC080...
0	[null]	Y	18-DEC-81	[null]	[null]	0	0	[null]	N	0106000020BC080...
0	[null]	Y	18-DEC-81	[null]	[null]	0	0	[null]	N	0106000020BC080...
0	[null]	Y	18-DEC-81	[null]	[null]	0	0	[null]	Y	0106000020BC080...
0	[null]	Y	29-OCT-10	541199	All Other Legal ...	505	0	[null]	[null]	
0	[null]	Y	18-DEC-81	[null]	[null]	0	0	[null]	Y	0106000020BC080...
0	[null]	Y	18-DEC-81	[null]	[null]	0	0	[null]	Y	0106000020BC080...
0	[null]	Y	18-DEC-81	[null]	[null]	0	0	[null]	N	0106000020BC080...

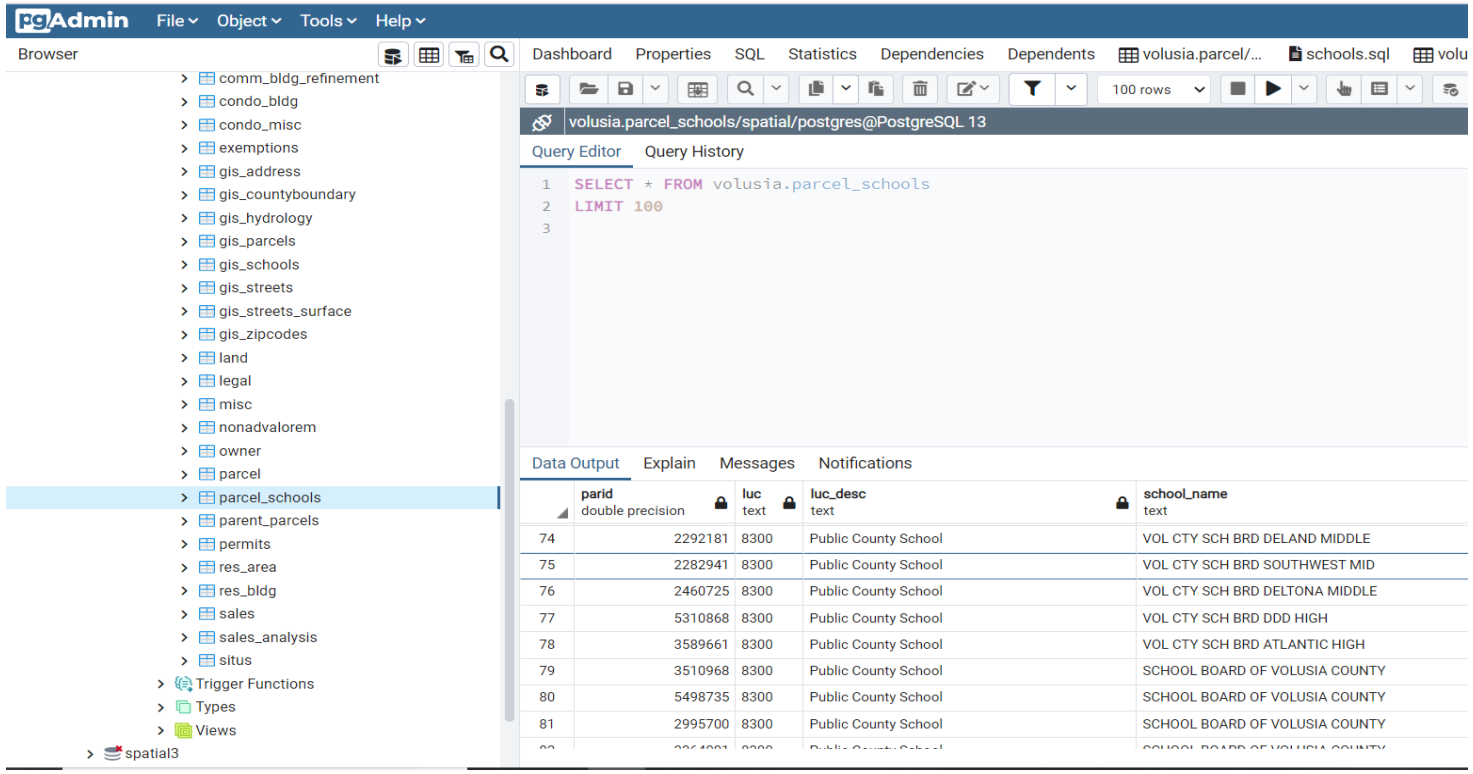
- Create gis_schools and make geometry into volusia.gis_schools

select parid, geom into volusia.gis_schools from volusia.parcel where luc='8300';



- Create Volusia.parcel_schools table and add the data from owner and parcel tables

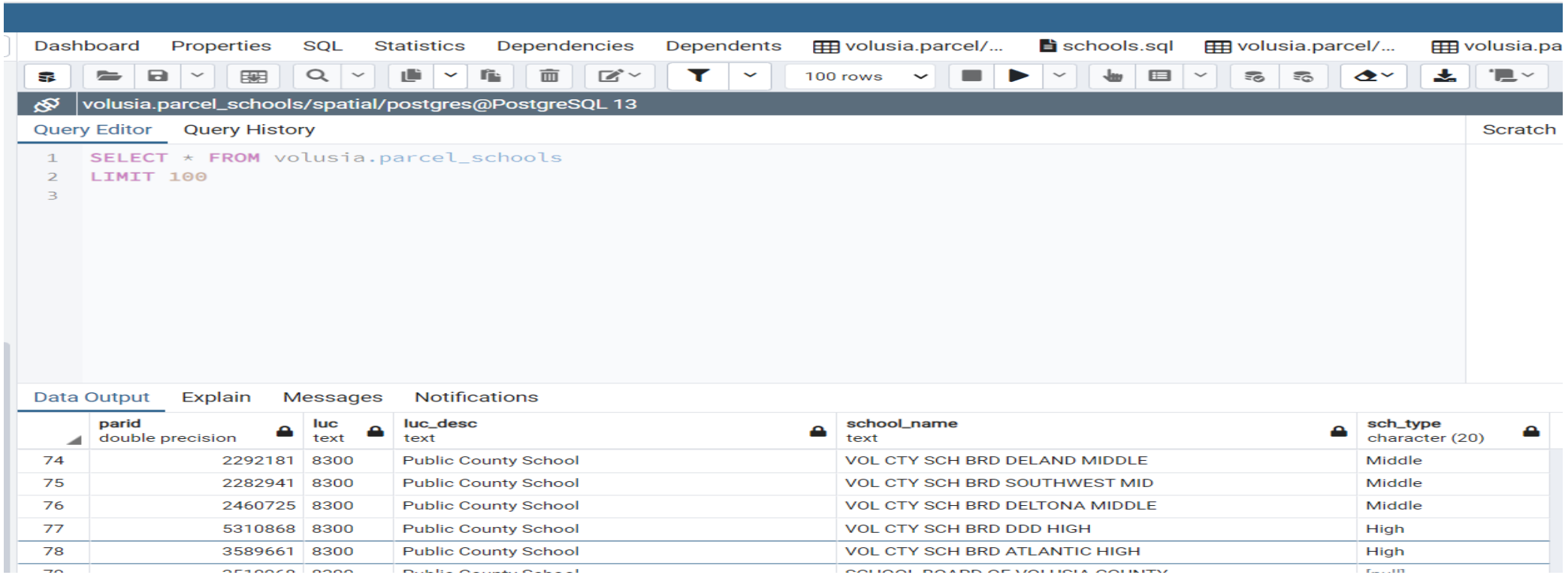
```
drop table if exists Volusia.parcel_schools ;
select  p.parid, p.luc,p.luc_desc,o.own1 as school_name into volusia.parcel_schools
from volusia.owner
 o join volusia.parcel p on o.parid=p.parid  where p.luc='8300';
```



	parid double precision	luc text	luc_desc text	school_name text
74	2292181	8300	Public County School	VOL CTY SCH BRD DELAND MIDDLE
75	2282941	8300	Public County School	VOL CTY SCH BRD SOUTHWEST MID
76	2460725	8300	Public County School	VOL CTY SCH BRD DELTONA MIDDLE
77	5310868	8300	Public County School	VOL CTY SCH BRD DDD HIGH
78	3589661	8300	Public County School	VOL CTY SCH BRD ATLANTIC HIGH
79	3510968	8300	Public County School	SCHOOL BOARD OF VOLUSIA COUNTY
80	5498735	8300	Public County School	SCHOOL BOARD OF VOLUSIA COUNTY
81	2995700	8300	Public County School	SCHOOL BOARD OF VOLUSIA COUNTY

- Add sch_typ column to the volusia.parcel_schools

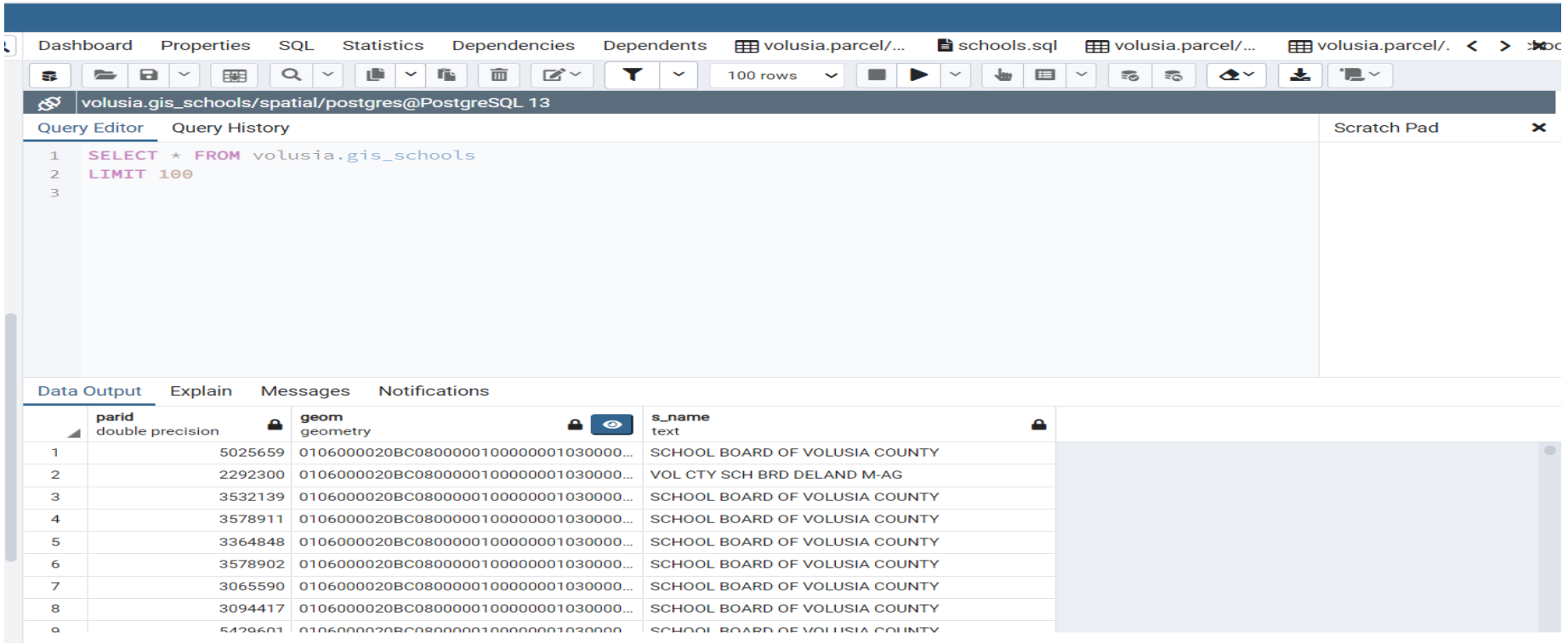
```
alter table volusia.parcel_schools  add column sch_type char(20);
update volusia.parcel_schools set sch_type='Elementary' where school_name ilike '%elem%';
update volusia.parcel_schools set sch_type='Middle' where school_name ilike '%mid%';
update volusia.parcel_schools set sch_type='High' where school_name ilike '%High%';
select sch_type, count(*) from volusia.parcel_schools  group by sch_type;
```



	parid double precision	luc text	luc_desc text	school_name text	sch_type character (20)
74	2292181	8300	Public County School	VOL CTY SCH BRD DELAND MIDDLE	Middle
75	2282941	8300	Public County School	VOL CTY SCH BRD SOUTHWEST MID	Middle
76	2460725	8300	Public County School	VOL CTY SCH BRD DELTONA MIDDLE	Middle
77	5310868	8300	Public County School	VOL CTY SCH BRD DDD HIGH	High
78	3589661	8300	Public County School	VOL CTY SCH BRD ATLANTIC HIGH	High

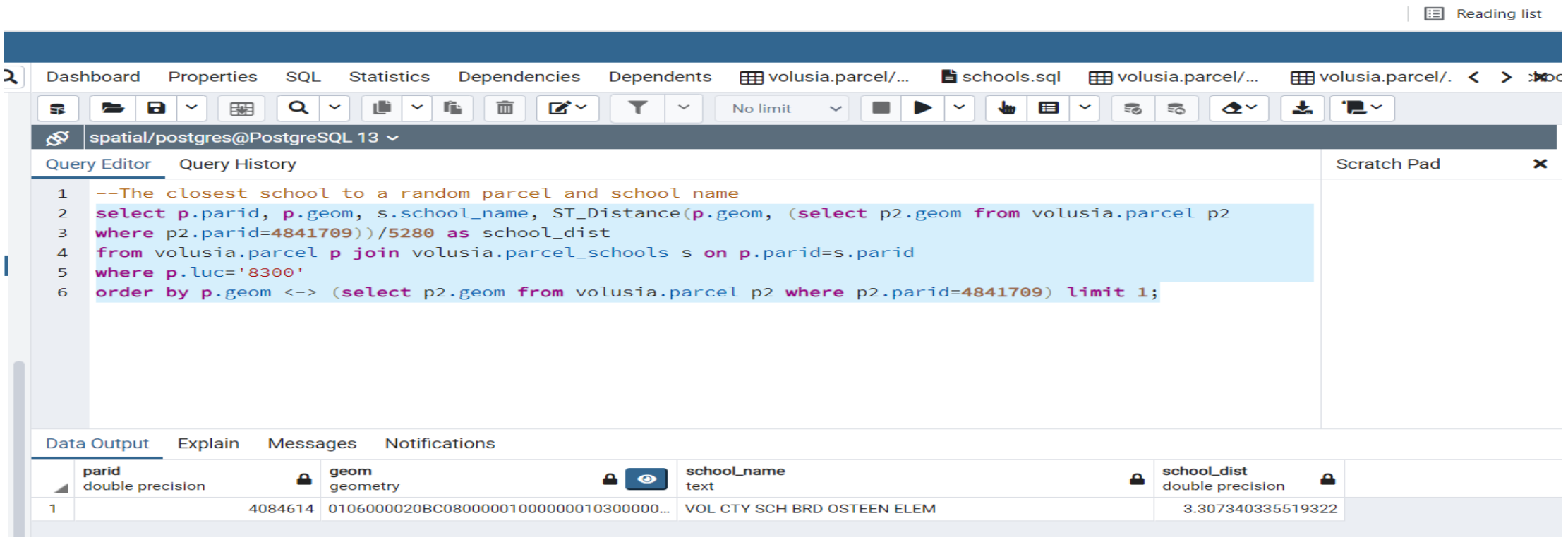
- Add school names into gis_schools

alter table volusia.gis_schools add column s_name text;
update volusia.gis_schools g set s_name = s.school_name from volusia.parcel_schools s where g.parid=s.parid;



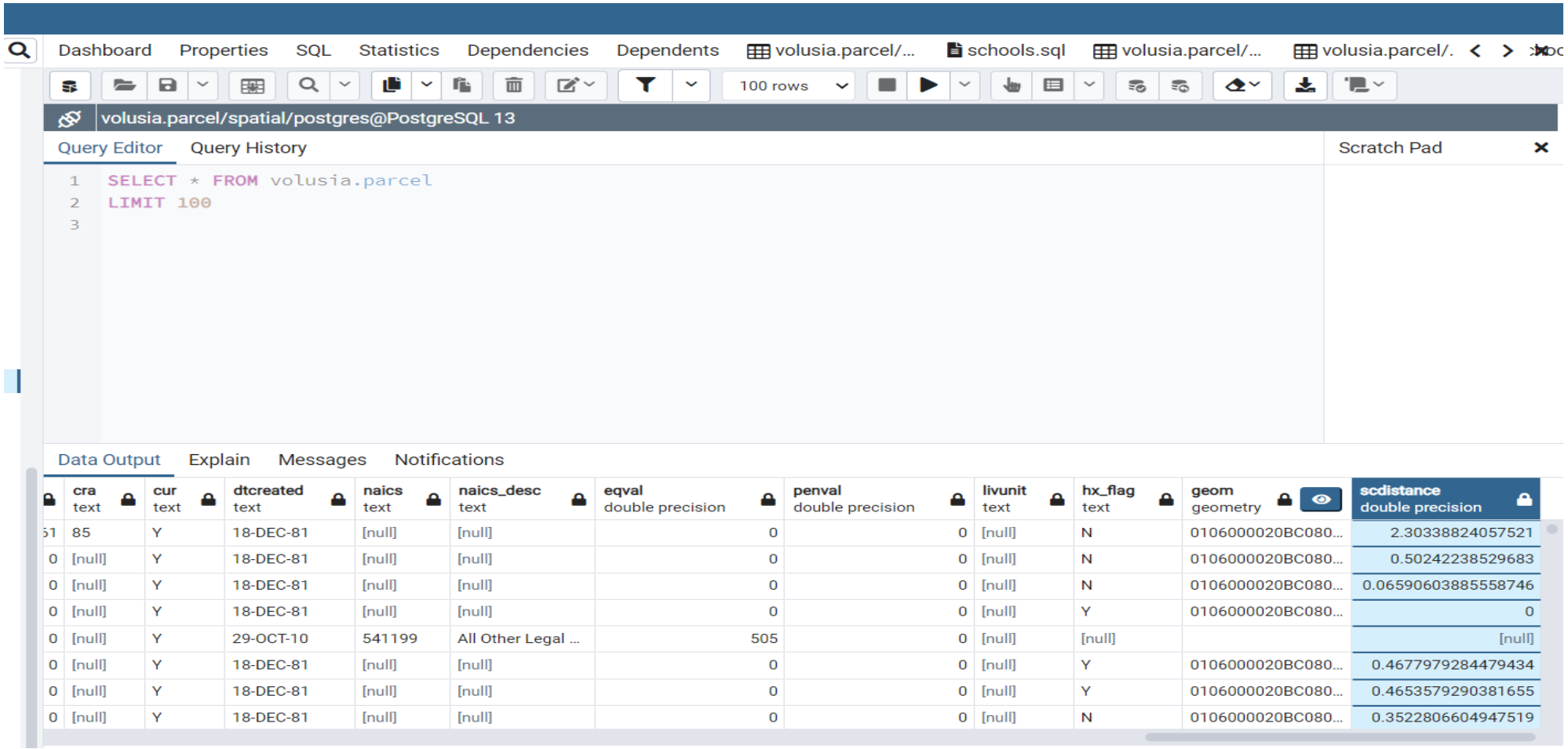
- The closest school to a random parcel and school name

```
select p.parid, p.geom, s.school_name, ST_Distance(p.geom, (select p2.geom from
volusia.parcel p2
where p2.parid=4841709))/5280 as school_dist
from volusia.parcel p join volusia.parcel_schools s on p.parid=s.parid
where p.luc='8300'
order by p.geom <-> (select p2.geom from volusia.parcel p2 where p2.parid=4841709) limit 1;
```



- Add scdistance column to the parcel table

alter table volusia.parcel add column scdistance double precision;



cra text	cur text	dtcreated text	naics text	naics_desc text	eqval double precision	penval double precision	livunit text	hx_flag text	geom geometry	scdistance double precision
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[null]	Y	18-DEC-81	[null]	[null]	0	0	[null]	N	0106000020BC080...	0.06590603885558746
[null]	Y	18-DEC-81	[null]	[null]	0	0	[null]	Y	0106000020BC080...	0
[null]	Y	29-OCT-10	541199	All Other Legal ...	505	0	[null]	[null]		[null]
[null]	Y	18-DEC-81	[null]	[null]	0	0	[null]	Y	0106000020BC080...	0.4677979284479434
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[null]	Y	18-DEC-81	[null]	[null]	0	0	[null]	N	0106000020BC080...	0.3522806604947519

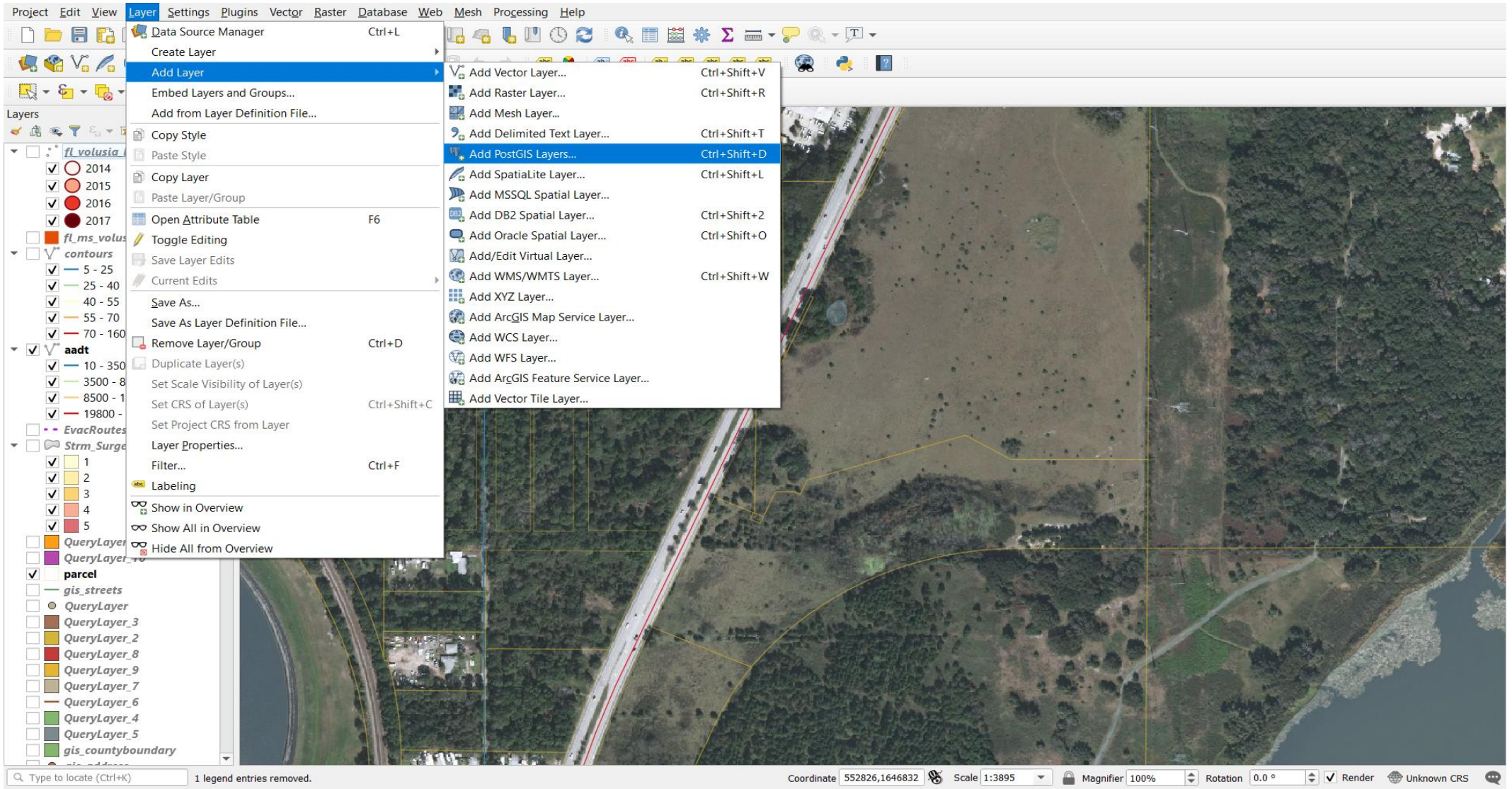
- Create index are vital in pgAdmine

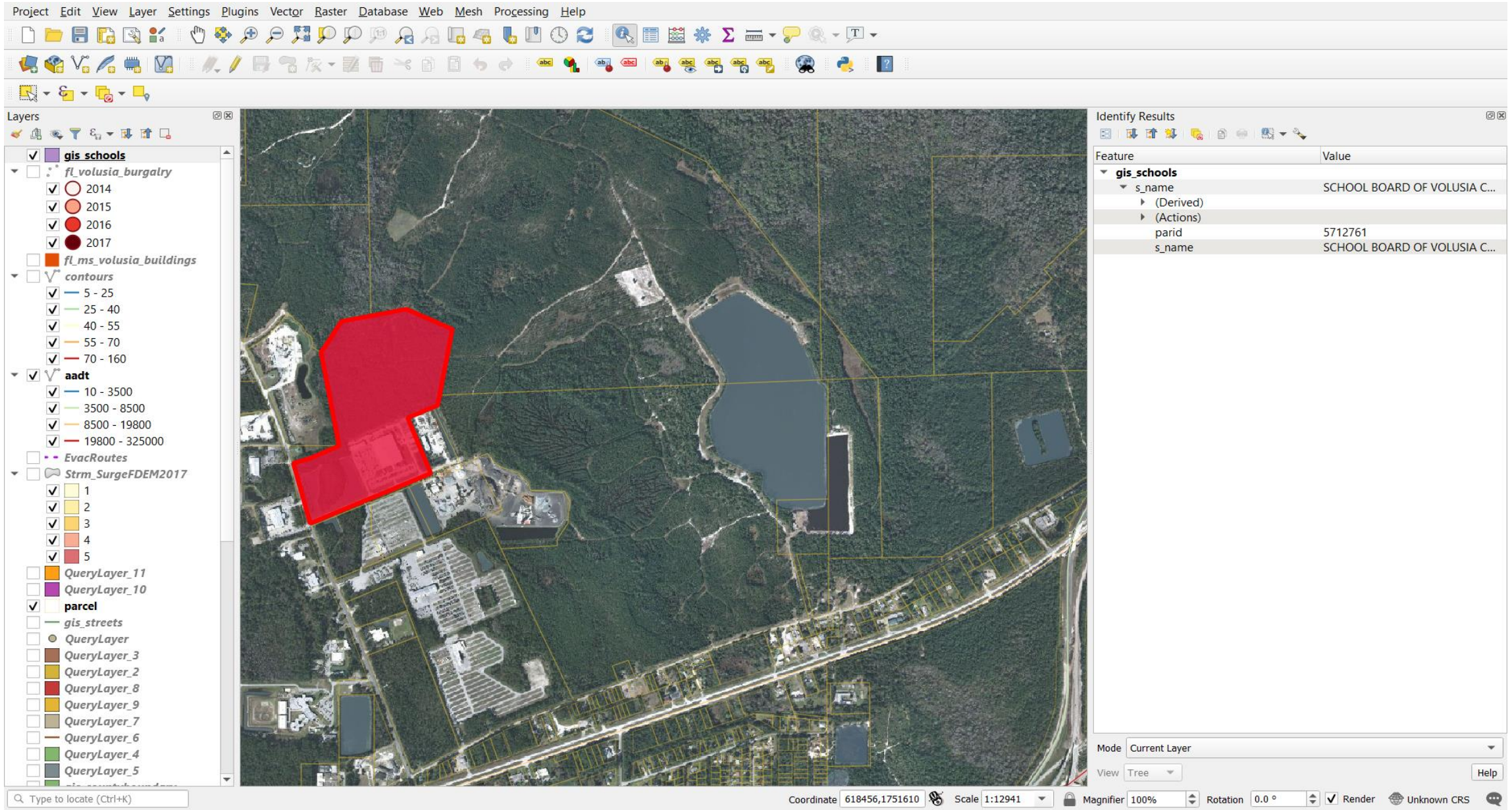
```
create index idx_parcel_luc on volusia.parcel (luc);
create index idx_parcel on volusia.parcel (parid);

CREATE INDEX parcel_geom_idx
  ON volusia.parcel
  USING GIST (geom);

 vacuum analyze volusia.parcel;
```

- Add Postgres layer in QGIS(gis_Schools)

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8500 - 19800
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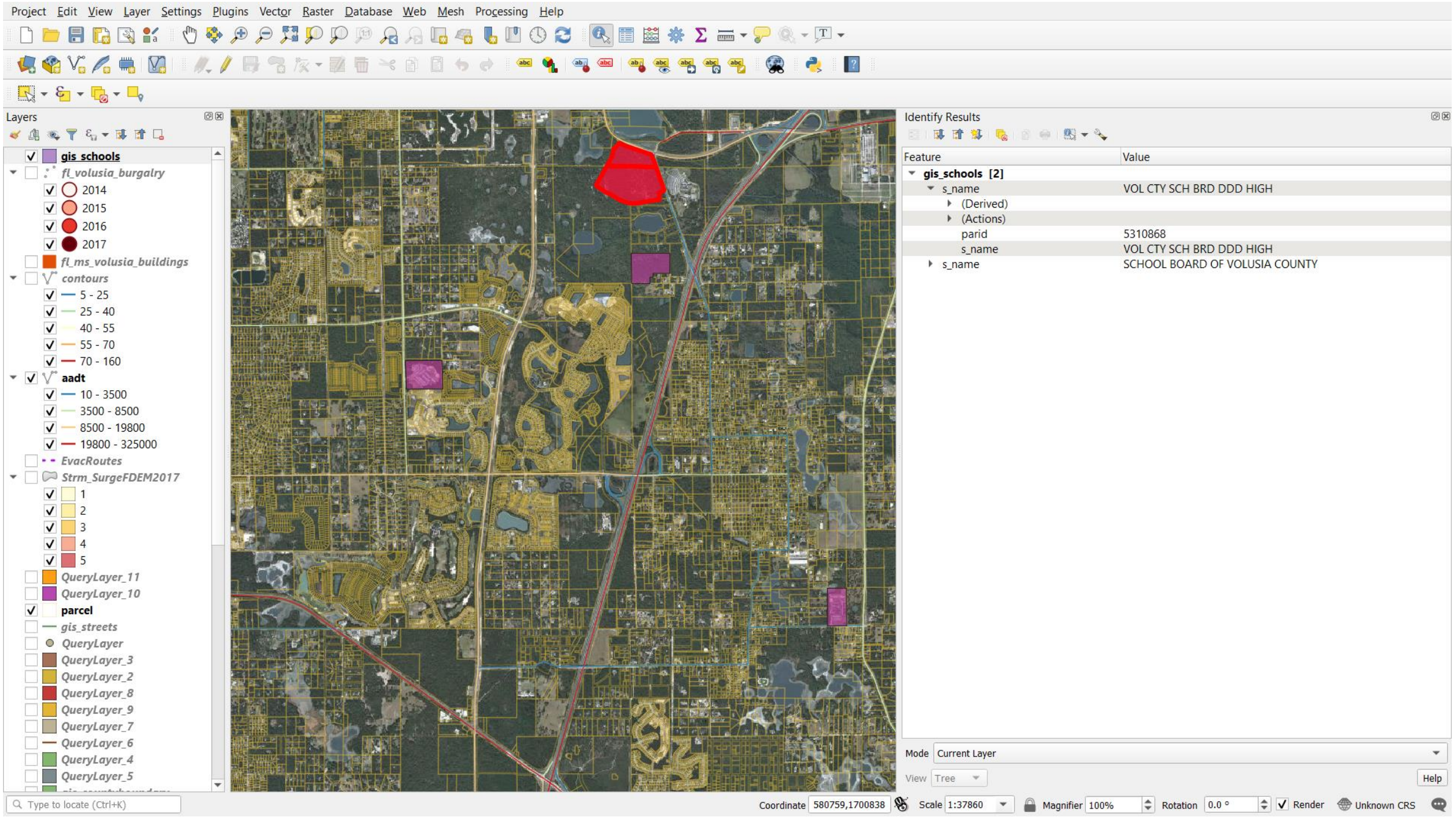
Project Edit View Layer Settings Plugins Vector Raster Database Web Mesh Processing Help
Layers
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QueryLayer
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VOL CTY SCH BRD DDD HIGH
(Derived)
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5310868
s_name
VOL CTY SCH BRD DDD HIGH
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SCHOOL BOARD OF VOLUSIA COUNTY
Mode
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View
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Scale
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Render
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