



ACCOLEDS 2014

Vancouver, BC

Unraveling the mysteries of mapping Census of Agriculture data

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Why Census of Agriculture?

- haven't "played" with it at recent ACCOLEDS

- data has 9 digit codes for CCS (Consolidated Census Subdivisions) boundaries...

	A	
5	North Saanich(CCS590117005)	
6	Central Saanich(CCS590117015)	
7	Saanich(CCS590117021)	

...while

- CCS geospatial boundary files are 7 digits

Table						
BcCCSDs						
	FID	Shape *	CCSUID	CCSNAME	PRUID	
▶	0	Polygon	5919015	Cowichan Valley G	59	British Columbia /
	1	Polygon	5909016	Fraser Valley B	59	British Columbia /
	2	Polygon	5933012	Thompson-Nicola N	59	British Columbia /

- “confidentiality constraints” and amalgamations of CCSs
- “agricultural ecumene...where significant agricultural activity is concentrated in Canada...”

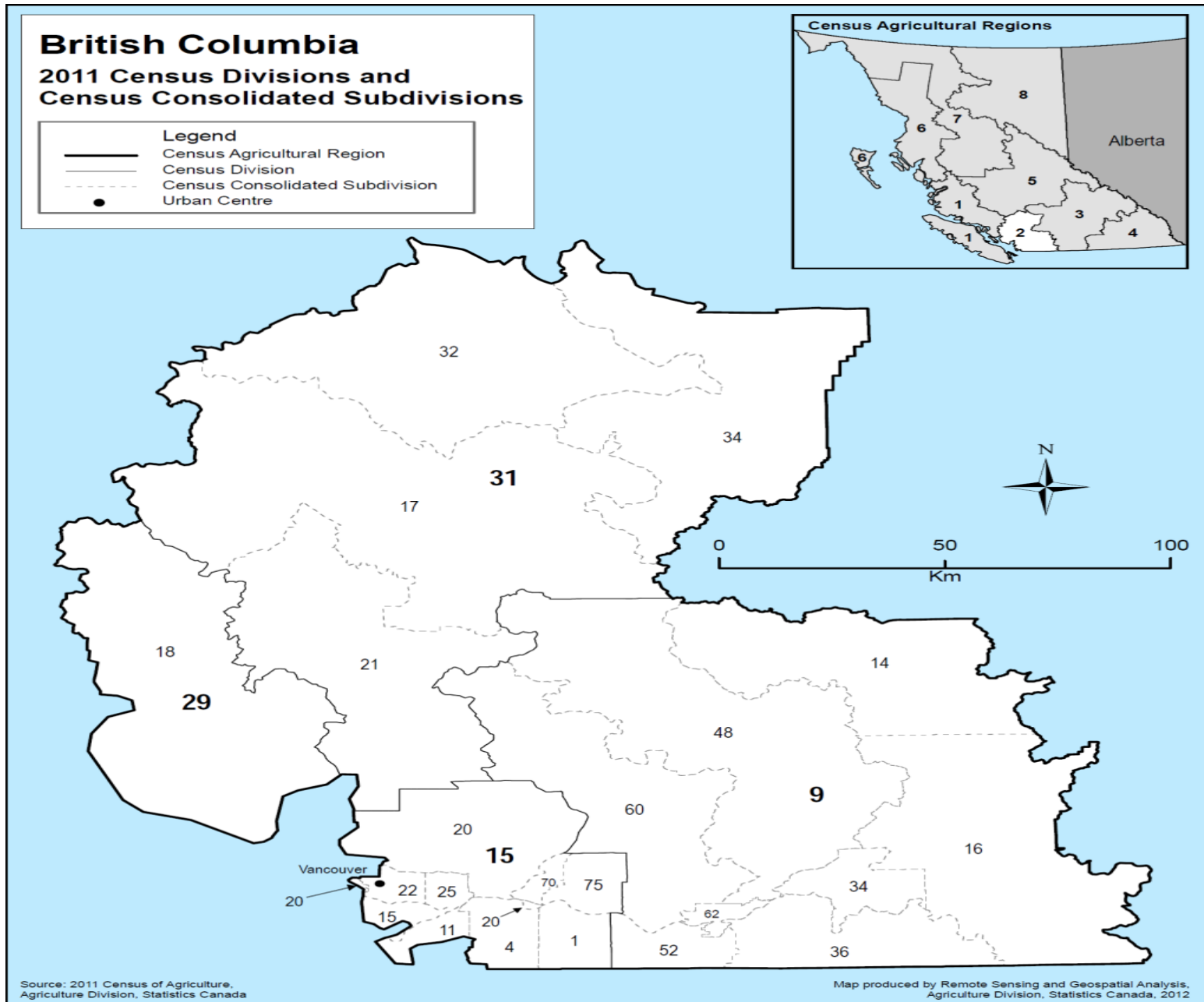
Outline

Part A: “massage” / prepare raw data from Census of Agriculture

Part B: manipulate / prepare the geospatial map layers

Part C: make map(s)

Census of Agriculture Geography



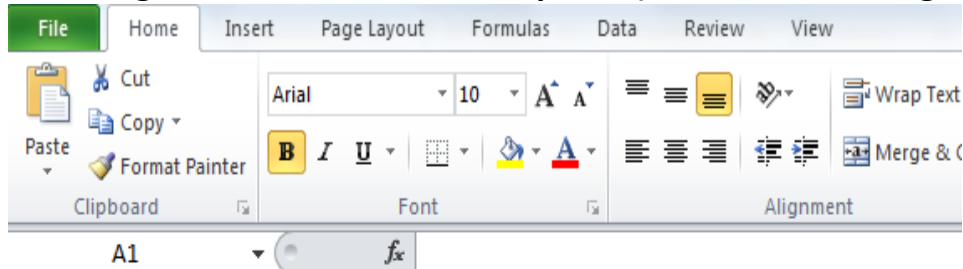
[About the artists](#)

November 17, 2014

All 2011 Farm and farm operator data are now available without charge in [CANSIM](#): Tables 004-0200 to 004-0242.**Farm and farm operator data**Available without charge in [CANSIM](#): Tables 004-0200 to 004-0242.[The Daily, May 10, 2012](#)[Highlights and analysis](#)**Selected historical farm and operator data**Available without charge in [CANSIM](#): tables 004-0001 to 004-0017.**Socioeconomic overview of the farm population data**The 2011 Census of Agriculture and the National Household Survey Linkage data are available without charge in [CANSIM](#): tables 004-0100 to 004-0129.[The Daily, November 27, 2013](#)[Highlights and analysis](#)[Data quality](#)**Canadian Agriculture at a Glance**[Canadian Agriculture at a Glance - Main page](#)[Demographic Changes in Canadian Agriculture](#)[Corn: Canada's third most valuable crop](#)[The changing face of the Canadian fruit and vegetable sector: 1941 to 2011](#)[Feeding the soil puts food on your plate](#)[The changing face of the Canadian hog industry](#)[Pulses in Canada](#)[Overview of livestock farm operating expenses](#)**Boundary files**[Census Agricultural Regions Boundary File](#)[Census Agricultural Regions Boundary File — Reference Guide](#)[Agricultural Ecoregions Boundary File](#)[Agricultural Ecoregions Boundary File — Reference Guide](#)**Maps**[Reference maps](#)[Thematic maps](#)

Part A. Prepare the data

1. Navigate to RawData.xls and open it (note the intermingled text with CCS, CDs, Prov IDs)



	A	B
1		Organic products, 2011
2		Organic products for sale (104)
3		total number
4	British Columbia(PR590000000)	569
5	Vancouver Island-Coast(CAR590100000)	93
6	Capital(CD590117000)	52
7	North Saanich(CCS590117005)	5
8	Central Saanich(CCS590117015)	6
9	Saanich(CCS590117021)	10
10	Capital F(CCS590117027)	17

2. highlight and right-click to
delete top rows and

3. add column headings: Geography & Organics

	A	B
1	Geography	Organics
2	British Columbia(PR590000000)	569
3	Vancouver Island-Coast(CAR590100000)	93
4	Capital(CD590117000)	52
5	North Saanich(CCS590117005)	5
6	Central Saanich(CCS590117015)	6
7	Saanich(CCS590117021)	10
8	Capital F(CCS590117027)	17
9	Capital G(CCS590117029)	7
10	Capital H (Part 2)(CCS590117056)	7

4. (Notice the “notes”: “confidentiality constraints”... “amalgamated...”)

Delete rows below Northern Rockies

	A	B	C	D	E	F	G	H	I	J
169	Northern Rockies(CD590859000)	0								
170	Northern Rockies(CCS590859007)	0								
171	Symbols:									
172	X	suppressed to meet the confidentiality requirements of the Statistics Act								
173	--	not available for a specific reference period								
174		0 true zero or a value rounded to zero								
175	General Notes									
176	The nine-digit geographic code at the end of the geographic names comprises two digits for the province, two for the Census Agricultural Regions, and five for the Census Divisions.									
177	There have been significant refinements in the geographic assignment of agricultural operations and changes in Census Consolidated Subdivisions.									
178	Due to confidentiality constraints, the data for one or more geographic areas having very few farms may be combined with the data from another area.									
179	Other boundary changes mean that caution should be taken when comparing the data for the following Census Agricultural Regions and Census Divisions.									
180	Also in British Columbia there was one boundary change where Census Division 590125000 was split into Census Division 590124000 and Census Division 590126000.									
181	Note(s):									
182		16	Due to confidentiality constraints the data for Census Division "590143000" were amalgamated with the data for Census Division "590144000".							
183		17	Due to confidentiality constraints the data for Census Division "590757000" were amalgamated with the data for Census Division "590758000".							
184		104	Organic products for sale. The total number of farms reporting does not equal the sum of the parts due to confidentiality constraints.							
185	Source:									
186	Statistics Canada, 2011 Census of Agriculture, Farm and Farm Operator Data, catalogue no. 95-640-XWE.									

5. Insert a column between Geography and Organic and call it PRCDCCS

B1 fx PRCDCCS			
	A	B	C
1	Geography	PRCDCCS	Organics
2	British Columbia(PR590000000)		569
3	Vancouver Island-Coast(CAR590100000)		93
4	Capital(CD590117000)		52
5	North Saanich(CCS590117005)		5
6	Central Saanich(CCS590117015)		6

6. Insert the following formula into cell B2 and drag it down to the end of the column:

=CONCATENATE(59,MID(A2,FIND("CCS",A2)+7,5))

Formula: In column A, start with and grab 59(BCprovID); then from beginning of CCS, 7 spots forward and grab 5 digits

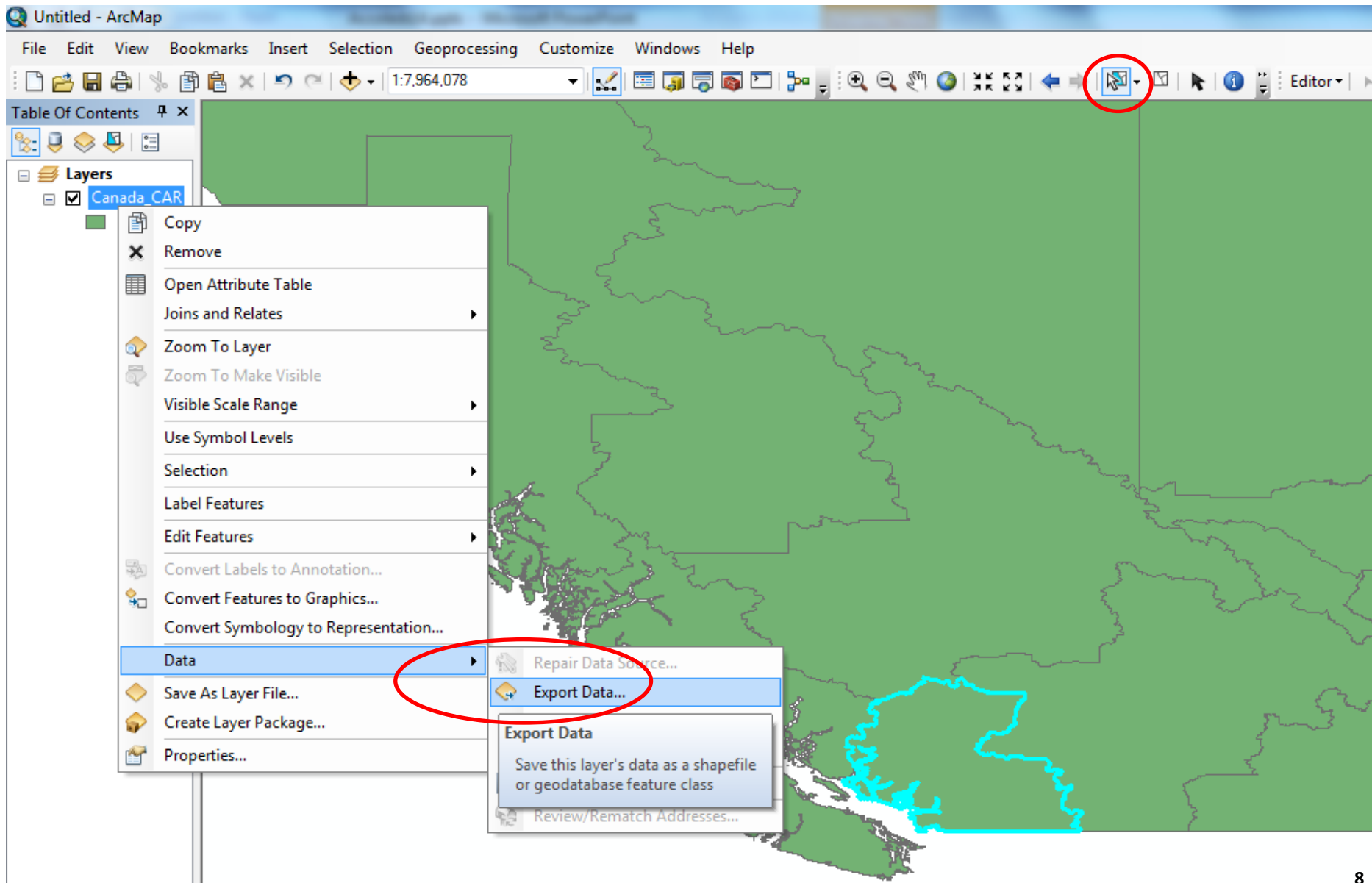
7. We need 7 digits to match CCS boundary file. (Need to drop CAR part of CCS & don't need Prov or CARs or CDs)

B2 fx =CONCATENATE(59,MID(A2,FIND("CCS",A2)+7,5))			
	A	B	C
1	Geography	PRCDCCS	Organics
2	British Columbia(PR590000000)	#VALUE!	569
3	Vancouver Island-Coast(CAR590100000)	#VALUE!	93
4	Capital(CD590117000)	#VALUE!	52
5	North Saanich(CCS590117005)	5917005	5
6	Central Saanich(CCS590117015)	5917015	6
7	Saanich(CCS590117021)	5917021	10
8	Capital F(CCS590117027)	5917027	17
9	Capital G(CCS590117029)	5917029	7
10	Capital H (Part 2)(CCS590117056)	5917056	7
11	Cowichan Valley(CD590119000)	#VALUE!	19
12	North Cowichan(CCS590119008)	5919008	10
13	Cowichan Valley G(CCS590119015)	5919015	1

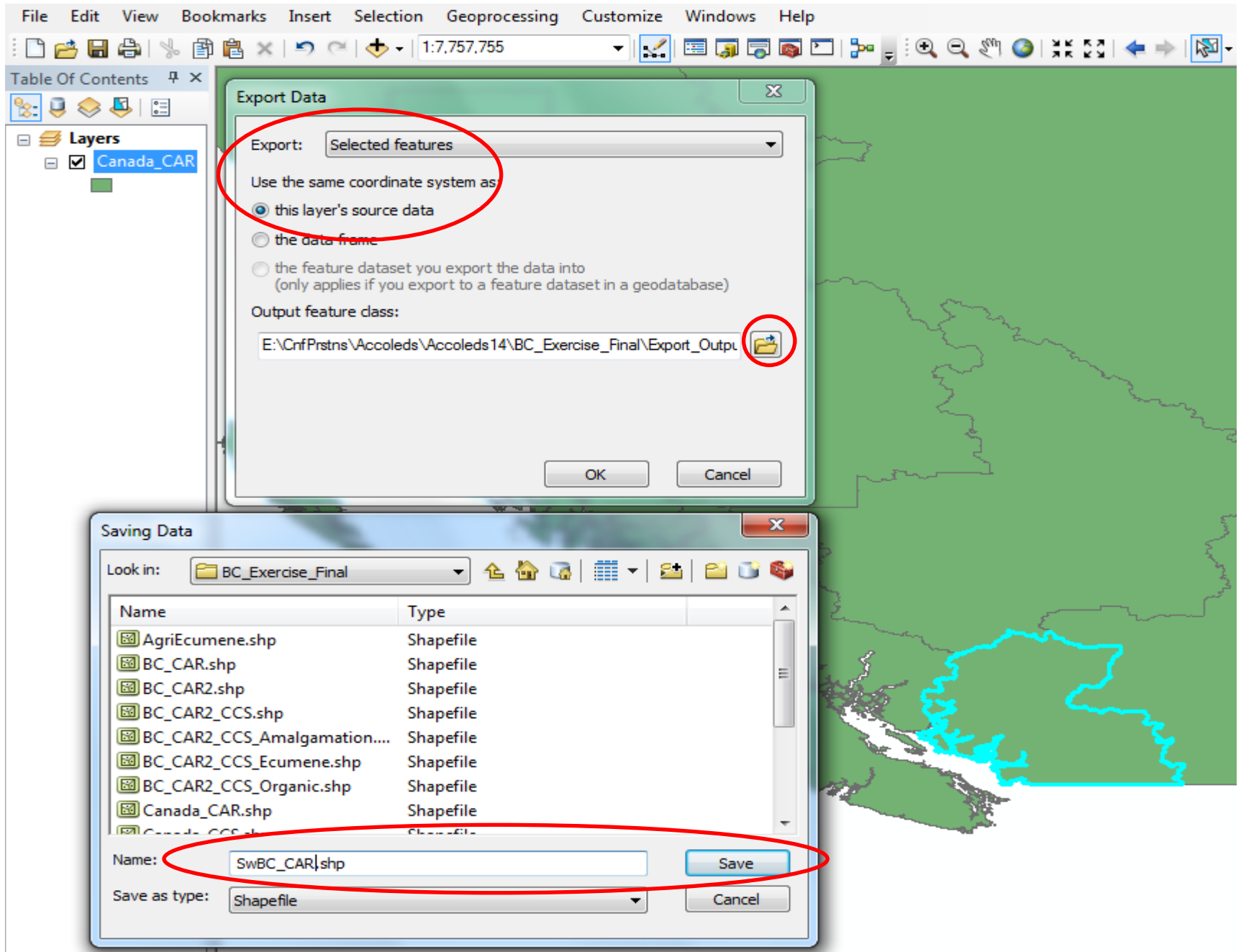
8. Save the file as ProcessedData.xls

Part B. Prepare the Map Layers

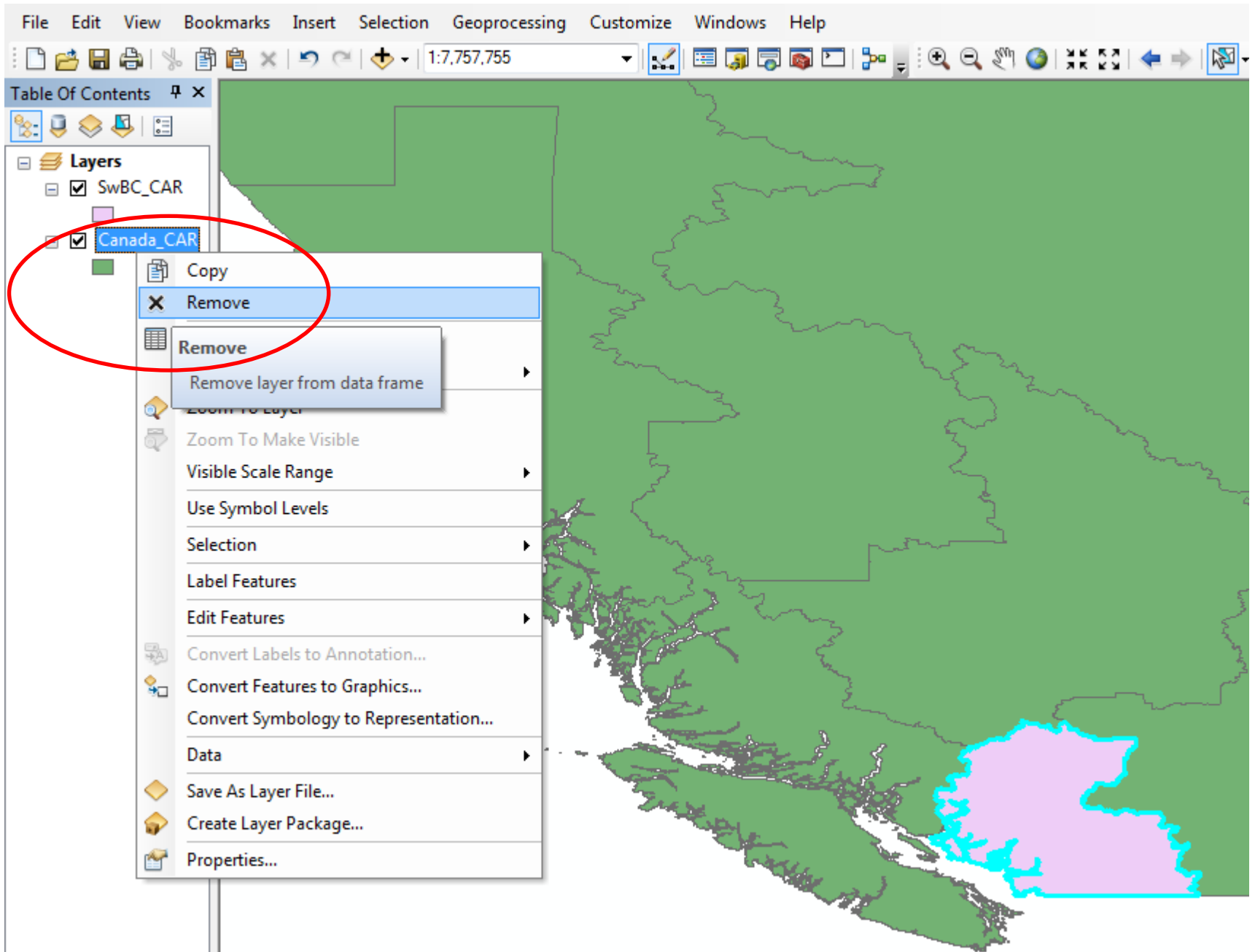
1. Start ArcMap...
2. add Canada_CAR
3. Zoom to SW BC
4. Use select  and highlight/select Lower Mainland-SW BC
5. right-click Canada_CAR to export data



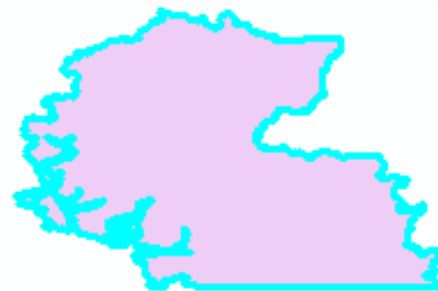
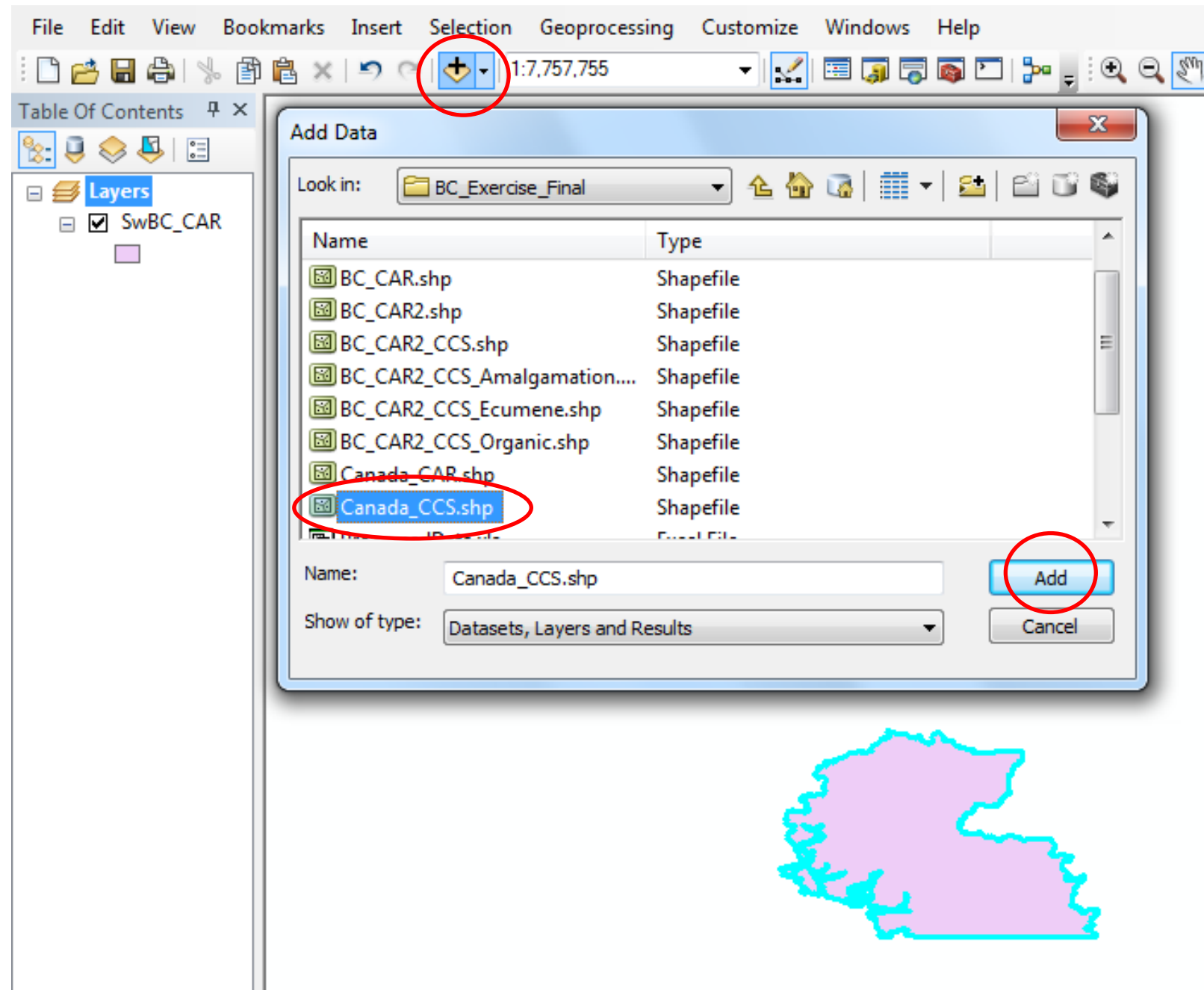
6. Save selected feature as SwBC_CAR.shp and add to map



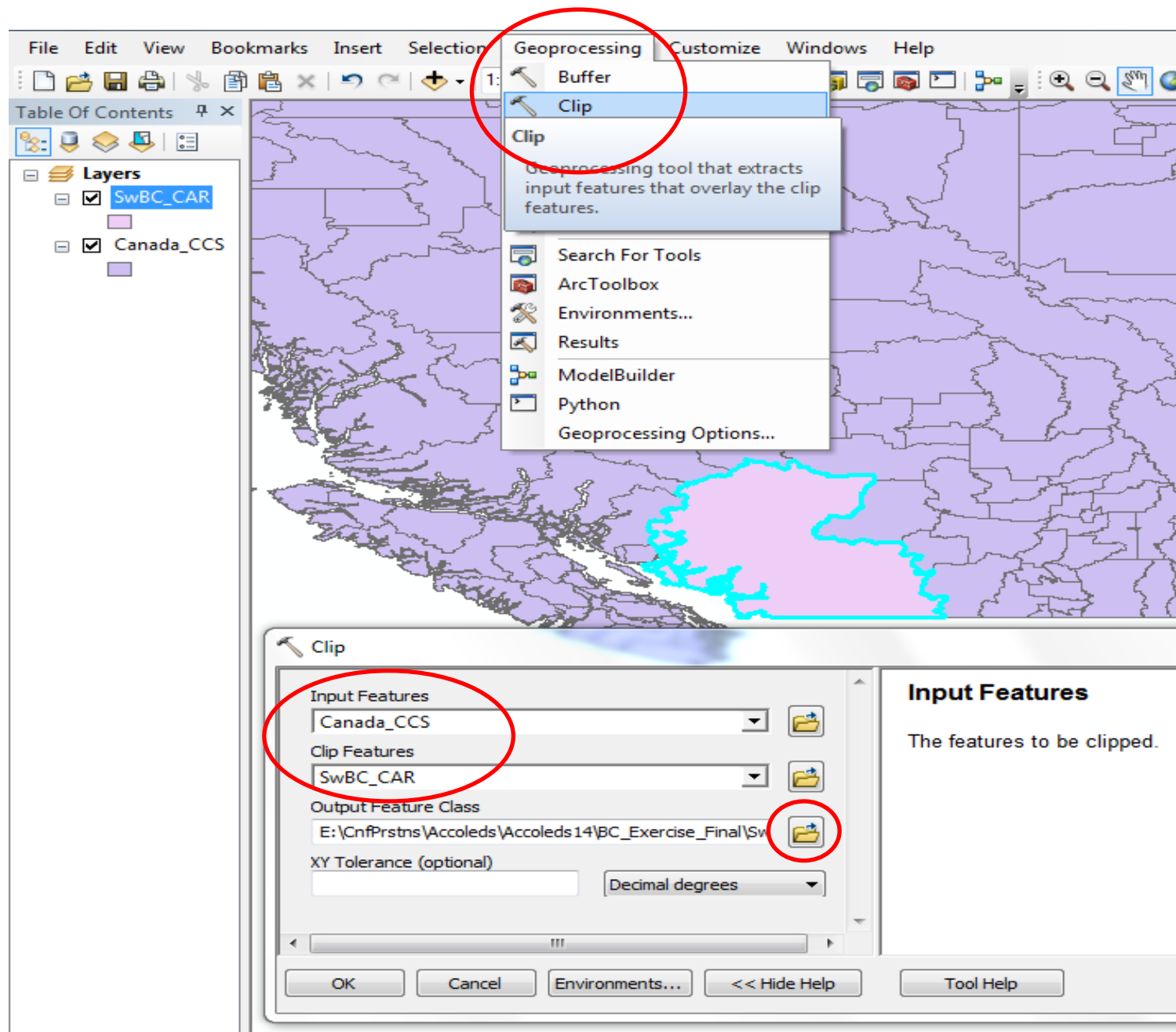
7. Right-click Canada_CAR to remove it.



8. Navigate to Canada_CCS and add it.



9. Clip Canada_CCS using SwBC_CAR...



10. Clip Canada_CCS using SwBC_CAR... save as SwBC_CAR_CCS.shp

The screenshot displays the ArcGIS Desktop interface. The **Layers** panel on the left shows two layers: **SwBC_CAR** (highlighted in blue) and **Canada_CCS**. The main map area shows a map of British Columbia with a cyan-colored area representing the **SwBC_CAR** layer.

The **Clip** tool is active, and its **Output Feature Class** dialog box is open. The dialog shows the following information:

- Look in:** BC_Exercise_Final
- Name:** SwBC_CAR_CCS.shp (circled in red)
- Save as type:** Feature classes
- Buttons:** Save, Cancel

The **Clip** tool's main dialog box is also visible, showing the following settings:

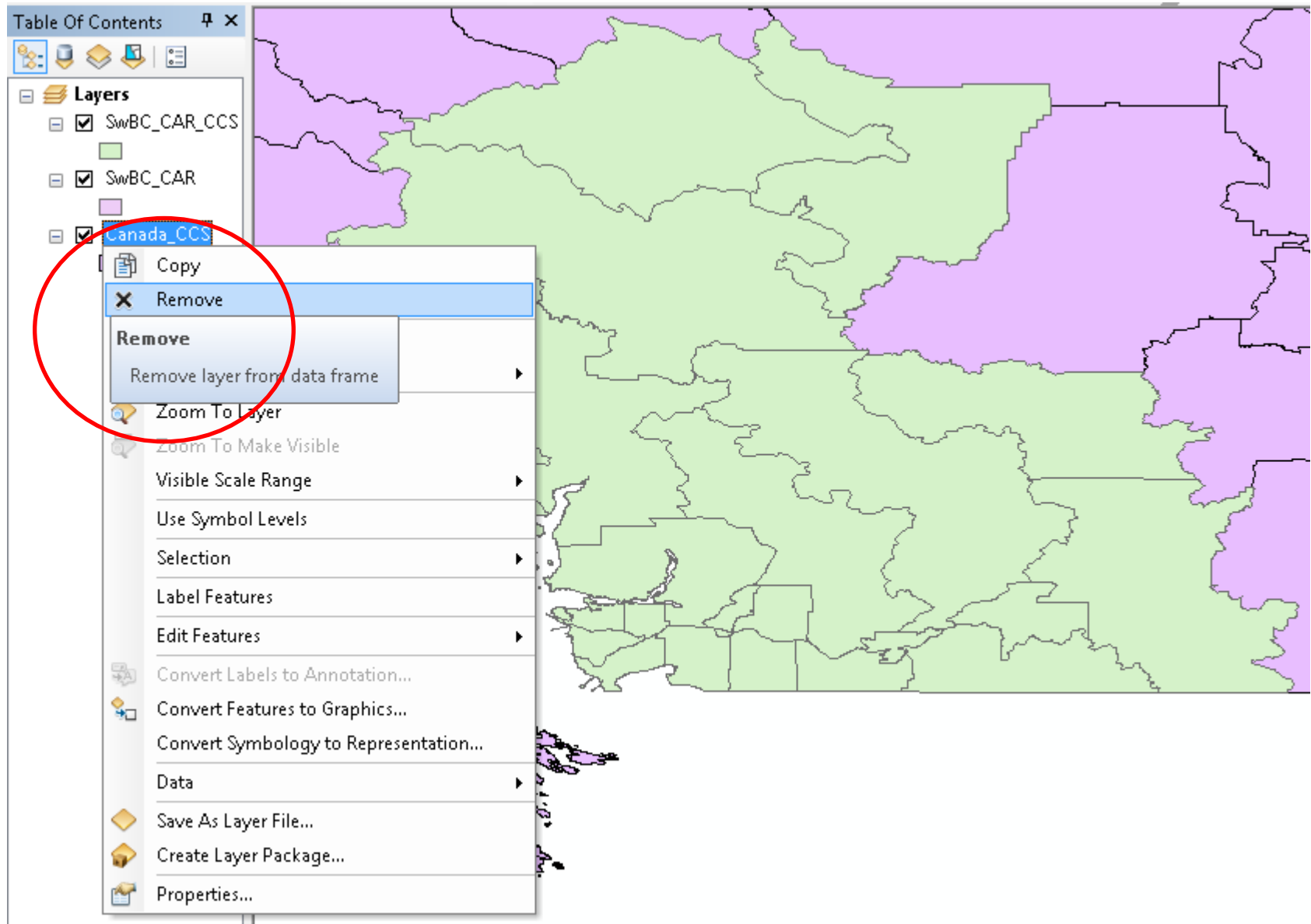
- Input Features:** Canada_CCS
- Clip Features:** SwBC_CAR
- Output Feature Class:** E:\CnfPrstns\Accoleds\Accoleds14\BC_Exercise_Final\SwBC_CAR_CCS.shp
- XY Tolerance (optional):** Decimal degrees
- Buttons:** OK (circled in red), Cancel, Environments..., << Hide Help, Tool Help

The **Output Feature Class** dialog box is also visible, showing the following information:

- Name:** SwBC_CAR_CCS.shp (circled in red)
- Save as type:** Feature classes
- Buttons:** Save, Cancel

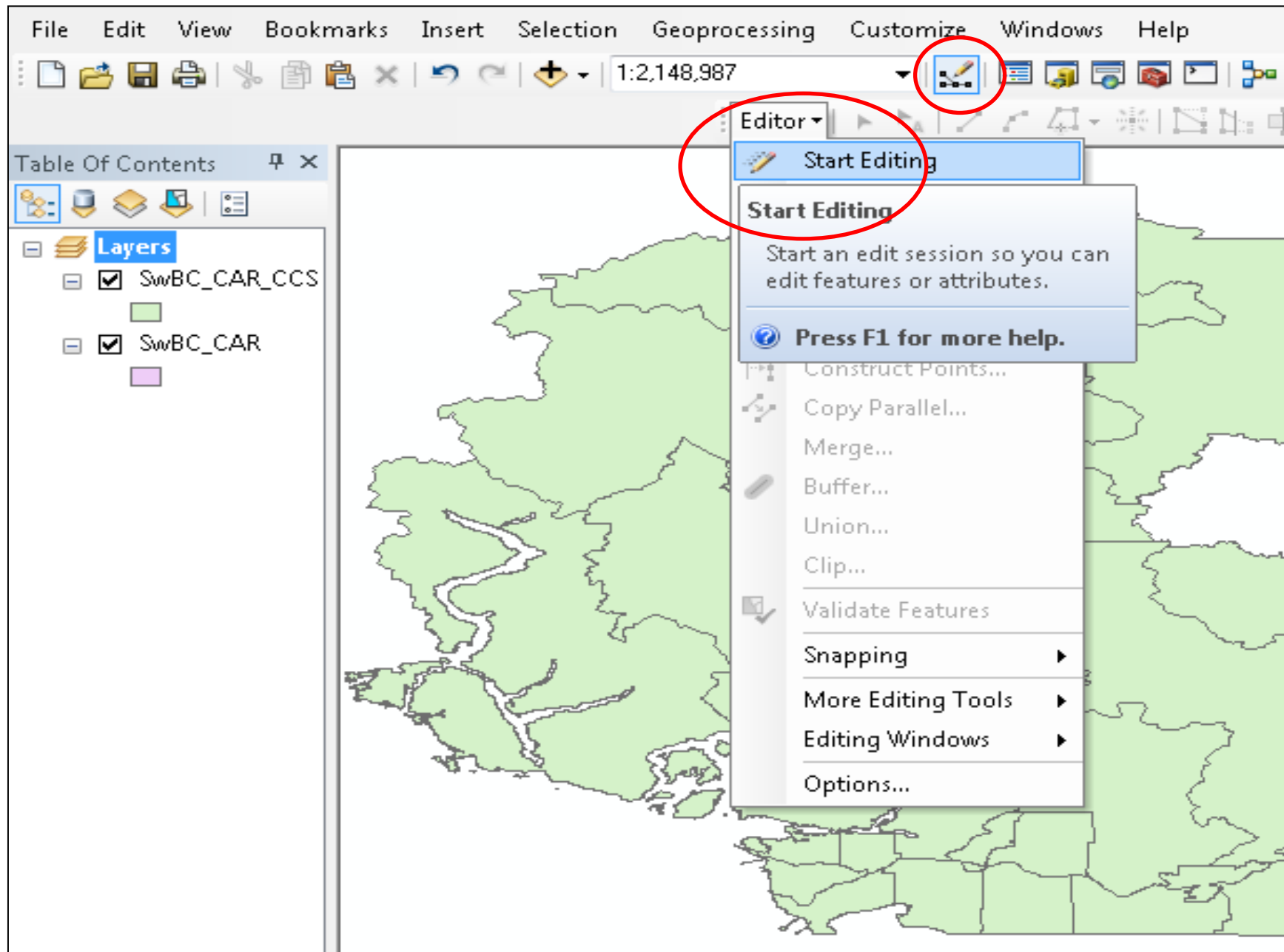
The **Clip** tool's status bar at the bottom right shows a green checkmark and the text "Clip" (circled in red), indicating the operation is complete. The status bar also displays the coordinates "-127.720 49.875 Decimal Degrees".

11. Right-click Canada_CSS to remove it



(12. if not already activated, activate the Editor toolbar : Top menu: Customize - Toolbars - Editor).

13. Click on Editor to Start Editing.



14. Right-click on SwBC_CAR_CCS to open its Attribute Table

The screenshot displays the ArcGIS Desktop interface. On the left, the 'Layers' panel shows the 'SwBC_CAR_CCS' layer selected. A right-click context menu is open, with 'Open Attribute Table' highlighted. A red circle is drawn around this option. Below it, a tooltip explains the shortcut: 'Open this layer's attribute table. Shortcut: CTRL + double-click layer name OR CTRL + T.' The main map area shows a green polygon representing the Fraser Valley region. On the right, the 'Table' window is open, displaying the attribute table for 'SwBC_CAR_CCS'.

FID	Shape *	CCSUID	CCSNAME	PRUID	
0	Polygon	5909016	Fraser Valley B	59	British Columbia
7	Polygon	5909016	Fraser Valley A	59	British Columbia
8	Polygon	5909016	Fraser Valley C	59	British Columbia
9	Polygon	5909034	Fraser Valley D	59	British Columbia
18	Polygon	5909036	Fraser Valley E	59	British Columbia
14	Polygon	5909052	Abbotsford	59	British Columbia
2	Polygon	5909060	Fraser Valley F	59	British Columbia
12	Polygon	5909062	Fraser Valley G	59	British Columbia
20	Polygon	5915001	Langley	59	British Columbia
13	Polygon	5915004	Surrey	59	British Columbia
10	Polygon	5915011	Delta	59	British Columbia
5	Polygon	5915015	Richmond	59	British Columbia
6	Polygon	5915020	Greater Vancouver A	59	British Columbia
3	Polygon	5915022	Vancouver	59	British Columbia
4	Polygon	5915025	Burnaby	59	British Columbia
19	Polygon	5915070	Pitt Meadows	59	British Columbia
1	Polygon	5915075	Maple Ridge	59	British Columbia
16	Polygon	5929018	Sunshine Coast A	59	British Columbia
15	Polygon	5931021	Squamish-Lillooet C	59	British Columbia
17	Polygon	5931021	Squamish-Lillooet D	59	British Columbia
11	Polygon	5931034	Squamish-Lillooet B	59	British Columbia
21	Polygon	5931034	Squamish-Lillooet A	59	British Columbia

The table window shows 22 records. The status bar at the bottom indicates '(0 out of 22 Selected)'.

15. Sort Ascending CCSUID because we will change some CCSUIDs because some were amalgamated as per <http://www.statcan.gc.ca/ca-ra2011/201105/59-eng.htm>

Table Of Contents

Layers

- ☒ SvwBC_CAR_CCS
- ☒ SvwBC_CAR

Table

SvwBC_CAR_CCS

FID	Shape *	CCSUID	CCSNAME	PRUID	
0	Polygon	5909016			British Columbia
1	Polygon	5915075			British Columbia
2	Polygon	5909060			British Columbia
3	Polygon	5915022			British Columbia
4	Polygon	5915025			British Columbia
5	Polygon	5915015			British Columbia
6	Polygon	5915020			British Columbia
7	Polygon	5909016			British Columbia
8	Polygon	5909016			British Columbia
9	Polygon	5909034			British Columbia
10	Polygon	5915011			British Columbia
11	Polygon	5931034			British Columbia
12	Polygon	5909062			British Columbia
13	Polygon	5915004			British Columbia
14	Polygon	5909052			British Columbia
15	Polygon	5931021			British Columbia
16	Polygon	5929018	Sunshine Coast A	59	British Columbia
17	Polygon	5931021	Squamish-Lillooet D	59	British Columbia
18	Polygon	5909036	Fraser Valley E	59	British Columbia
19	Polygon	5915070	Pitt Meadows	59	British Columbia
20	Polygon	5915001	Langley	59	British Columbia
21	Polygon	5931034	Squamish-Lillooet A	59	British Columbia

Sort Ascending

Sort Ascending

Sort the values in this field in ascending order (A - Z) (1 - 9).

Statistics...

Field Calculator...

Calculate Geometry...

Turn Field Off

Freeze/Unfreeze Column

Delete Field

Properties...

(0 out of 22 Selected)

SvwBC_CAR_CCS

16. Change CCSUID numbers 5909014 & 5909048 to 5909016;
change CCSUID number 5931017 to 5931021;
change CCSUID number 5931032 to 5931034

Table Of Contents

Layers

- ☒ SvwBC_CAR_CCS
- ☒ SvwBC_CAR

Table

SvwBC_CAR_CCS

	FID	Shape *	CCSUID	CCSNAME	PRUID	
▶	0	Polygon	5909016	Fraser Valley B	59	British Columbia .
	7	Polygon	5909016	Fraser Valley A	59	British Columbia .
	8	Polygon	5909016	Fraser Valley C	59	British Columbia .
	9	Polygon	5909034	Fraser Valley D	59	British Columbia .
	18	Polygon	5909036	Fraser Valley E	59	British Columbia .
	14	Polygon	5909052	Abbotsford	59	British Columbia .
	2	Polygon	5909060	Fraser Valley F	59	British Columbia .
	12	Polygon	5909062	Fraser Valley G	59	British Columbia .
	20	Polygon	5915001	Langley	59	British Columbia .
	13	Polygon	5915004	Surrey	59	British Columbia .
	10	Polygon	5915011	Delta	59	British Columbia .
	5	Polygon	5915015	Richmond	59	British Columbia .
	6	Polygon	5915020	Greater Vancouver A	59	British Columbia .
	3	Polygon	5915022	Vancouver	59	British Columbia .
	4	Polygon	5915025	Burnaby	59	British Columbia .
	19	Polygon	5915070	Pitt Meadows	59	British Columbia .
	1	Polygon	5915075	Maple Ridge	59	British Columbia .
	16	Polygon	5929018	Sunshine Coast A	59	British Columbia .
	15	Polygon	5931021	Squamish-Lillooet C	59	British Columbia .
	17	Polygon	5931021	Squamish-Lillooet D	59	British Columbia .
	11	Polygon	5931034	Squamish-Lillooet B	59	British Columbia .
	21	Polygon	5931034	Squamish-Lillooet A	59	British Columbia .

(0 out of 22 Selected)

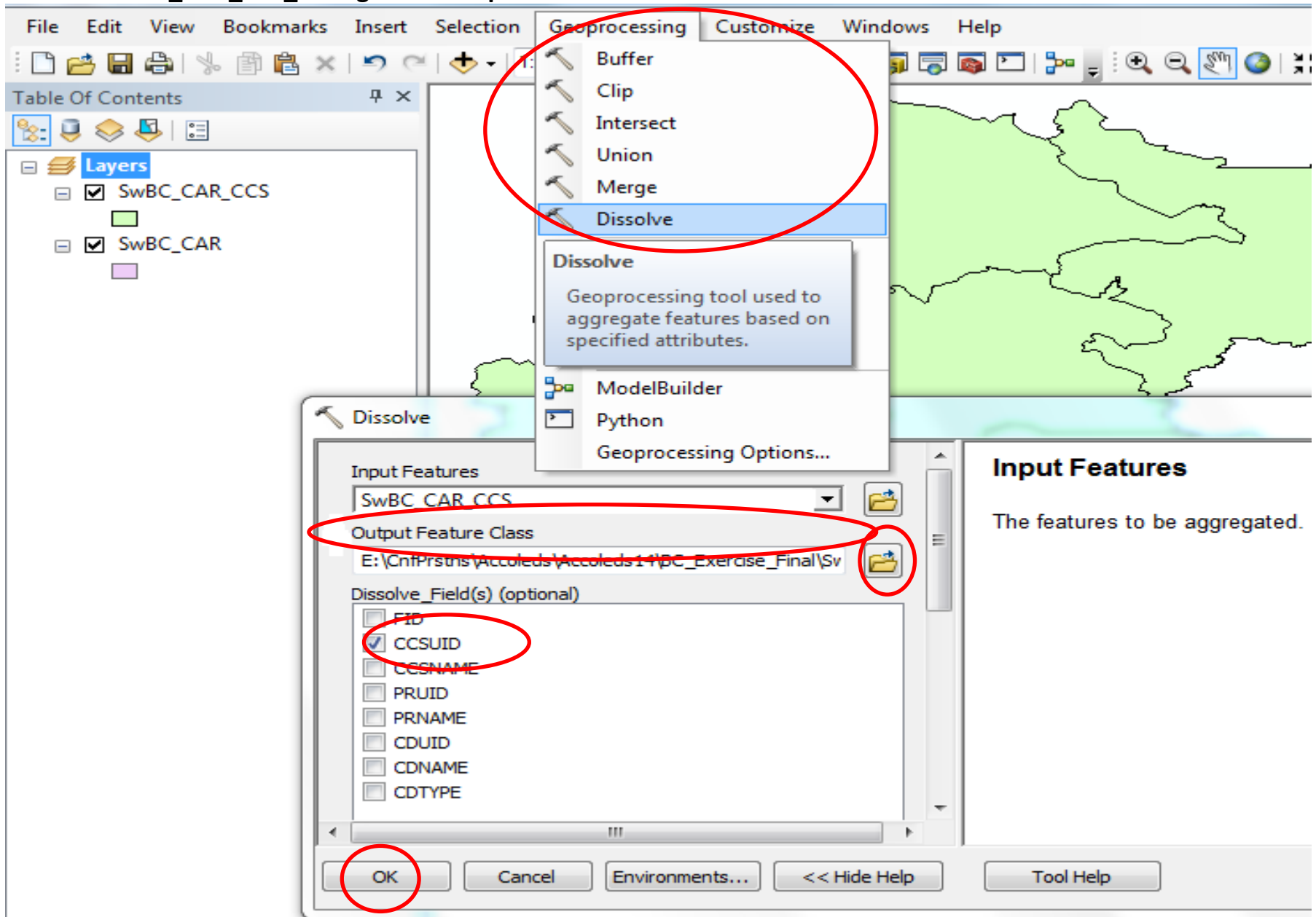
SvwBC_CAR_CCS

17. on Editor, Stop Editing and Save the Changes; (close the attribute table)

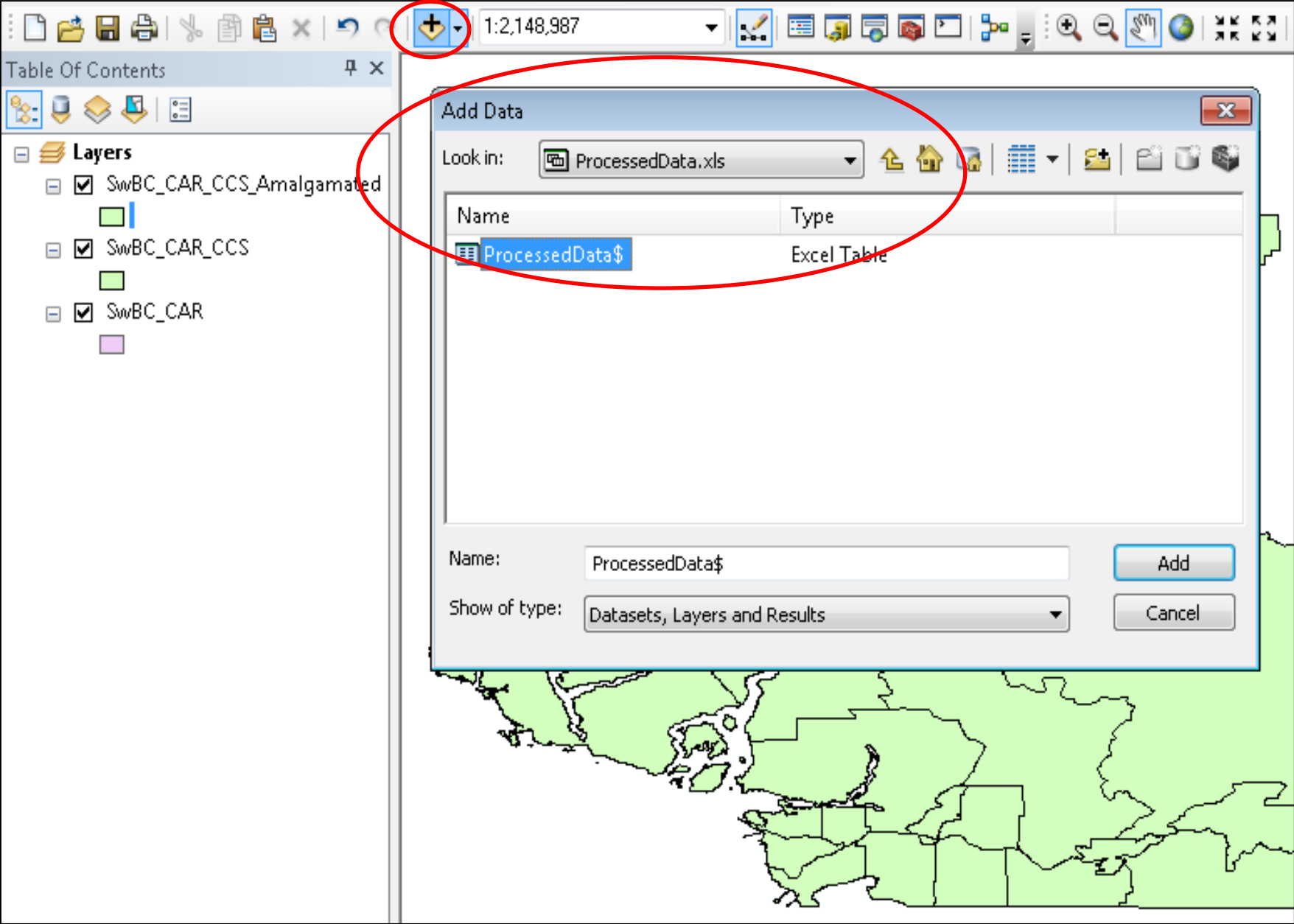
The screenshot shows the QGIS desktop environment. On the left, the 'Table of Contents' panel lists two layers: 'SwBC_CAR_CCS' (green) and 'SwBC_CAR' (purple). The main map area displays a table of data for the 'SwBC_CAR_CCS' layer. The table has four columns: 'FID', 'Shape', 'CCSUID', and a description. The 'Editor' menu is open, and the 'Stop Editing' option is highlighted with a red circle. A tooltip for 'Stop Editing' is visible, stating: 'Stop the edit session. If you have any unsaved edits, you are prompted to save them.'

FID	Shape	CCSUID	Description
0	Polygon	5909016	British Columbia / Cold
7	Polygon	5909016	British Columbia / Cold
8	Polygon	5909016	British Columbia / Cold
9	Polygon	5909034	British Columbia / Cold
18	Polygon	5909036	British Columbia / Cold
14	Polygon	5909052	British Columbia / Cold
2	Polygon	5909060	British Columbia / Cold
12	Polygon	5909062	British Columbia / Cold
20	Polygon	5915001	British Columbia / Cold
13	Polygon	5915004	British Columbia / Cold
10	Polygon	5915011	British Columbia / Cold
5	Polygon	5915015	British Columbia / Cold
6	Polygon	5915020	British Columbia / Cold
3	Polygon	5915022	British Columbia / Cold
4	Polygon	5915025	Burnaby 59 British Columbia / Cold
19	Polygon	5915070	Pitt Meadows 59 British Columbia / Cold
1	Polygon	5915075	Maple Ridge 59 British Columbia / Cold
16	Polygon	5929018	Sunshine Coast A 59 British Columbia / Cold
15	Polygon	5931021	Squamish-Lillooet C 59 British Columbia / Cold
17	Polygon	5931021	Squamish-Lillooet D 59 British Columbia / Cold
11	Polygon	5931034	Squamish-Lillooet B 59 British Columbia / Cold
21	Polygon	5931034	Squamish-Lillooet A 59 British Columbia / Cold

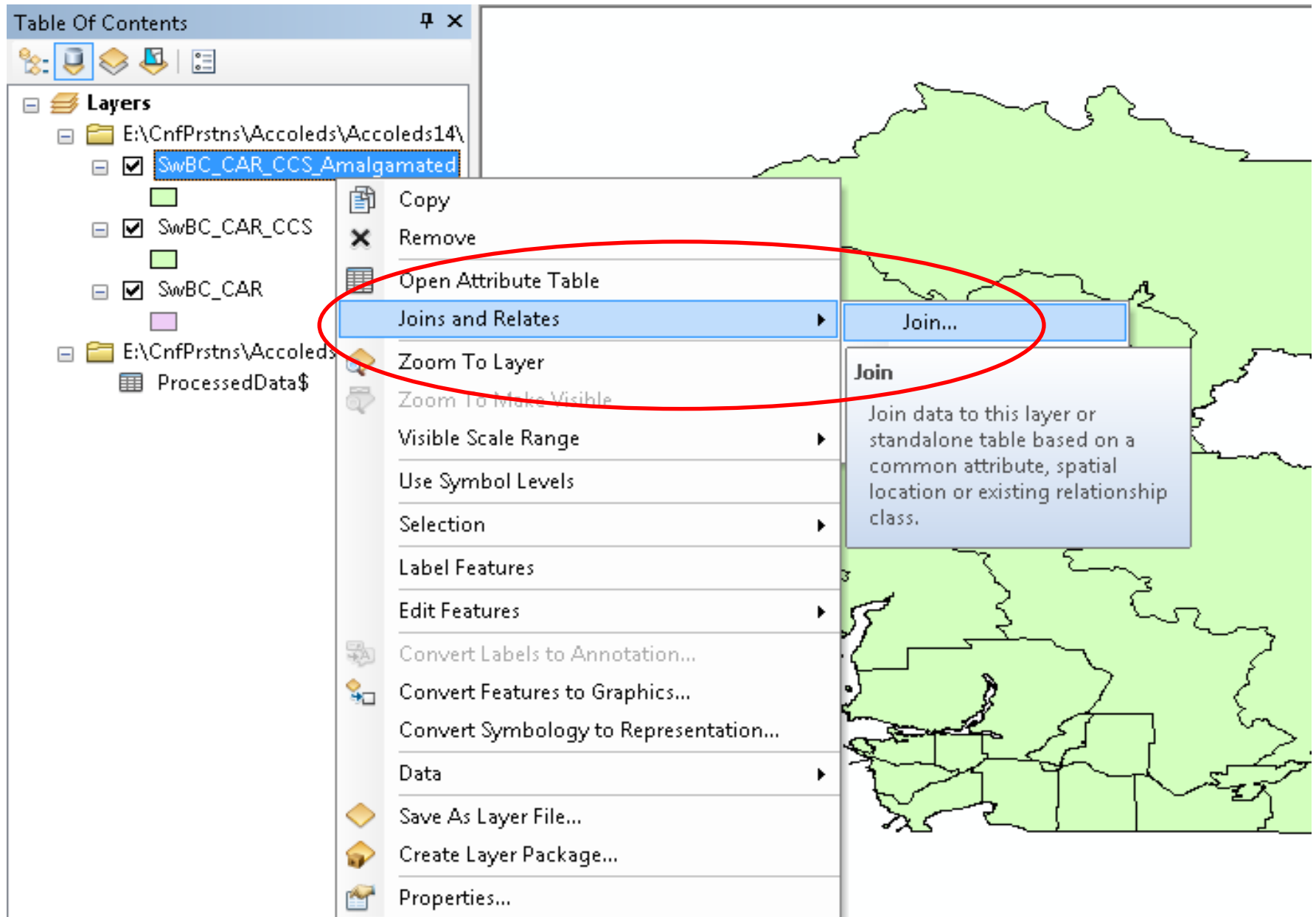
18. Amalgamate the CCSUIDs with the Dissolve tool (to reflect the AgCensus amalgamations);
save as SwBC_CAR_CCS_Amalgamated.shp



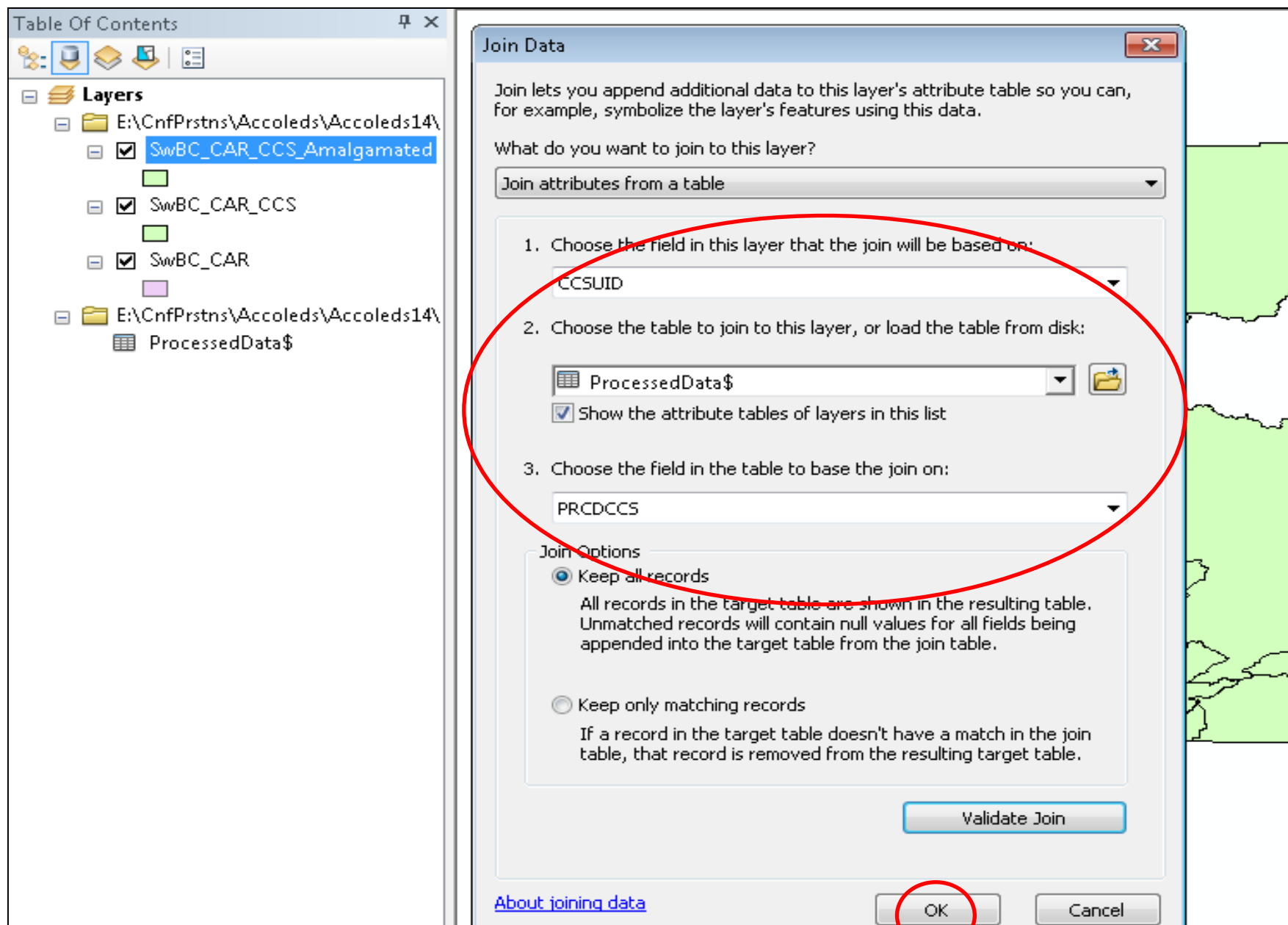
19. navigate to and Add ProcessedData.xls (processedData\$ worksheet)



20. right-click on SwBC_CAR_CCS_Amalgamated to join...attributes from a table...



21. Join field CCSUID and ProcessedData field PRCDCCS



22. ProcessedData has been added to SwBC_CAR_CCS_Amalamated

Table Of Contents

Layers

- E:\CnfPrstns\Accoleds\Accoleds14\
- ☒ SwBC_CAR_CCS_Amalqamated

Copy

Remove

Open Attribute Table

Open Attribute Table

Open this layer's attribute table.
Shortcut: CTRL + double-click
layer name OR CTRL + T.

Use Symbol Levels

Selection

Label Features

Edit Features

Convert Labels to Annotation...

Convert Features to Graphics...

Convert Symbolology to Representation...

Data

Save As Layer File...

Create Layer Package...

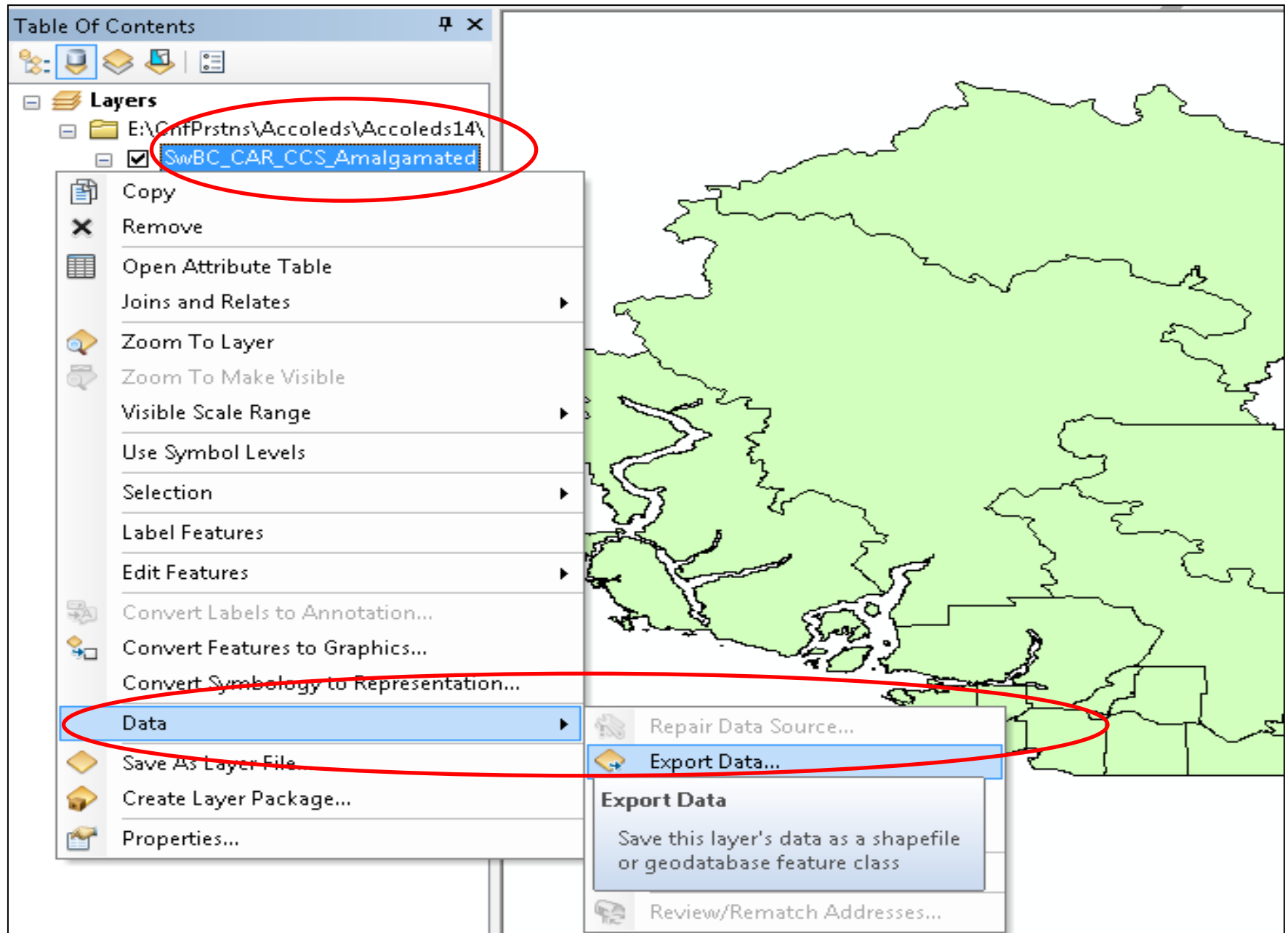
Properties...

Table

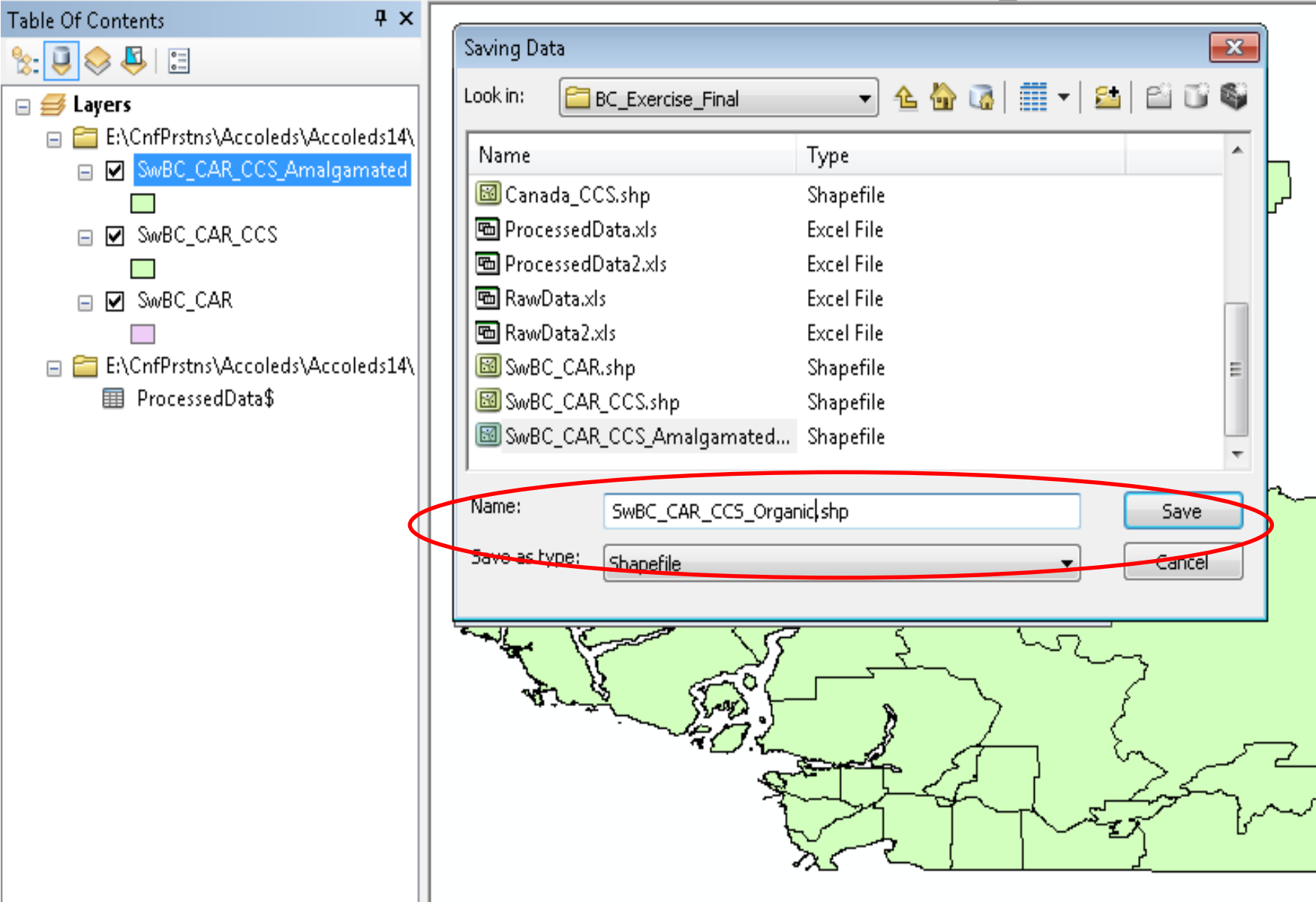
SwBC_CAR_CCS_Amalqamated

	FID	Shape *	CCSUID	Geography	PRCDCCS	Organic
▶	0	Polygon	5909016	Fraser Valley B(CCS590209016)	5909016	2
	1	Polygon	5909034	Fraser Valley D(CCS590209034)	5909034	9
	2	Polygon	5909036	Fraser Valley E(CCS590209036)	5909036	29
	3	Polygon	5909052	Abbotsford(CCS590209052)	5909052	32
	4	Polygon	5909060	Fraser Valley F(CCS590209060)	5909060	2
	5	Polygon	5909062	Fraser Valley G(CCS590209062)	5909062	1
	6	Polygon	5915001	Langley(CCS590215001)	5915001	18
	7	Polygon	5915004	Surrey(CCS590215004)	5915004	8
	8	Polygon	5915011	Delta(CCS590215011)	5915011	5
	9	Polygon	5915015	Richmond(CCS590215015)	5915015	1
	10	Polygon	5915020	Greater Vancouver A(CCS590215020)	5915020	1
	11	Polygon	5915022	Vancouver(CCS590215022)	5915022	0
	12	Polygon	5915025	Burnaby(CCS590215025)	5915025	1
	13	Polygon	5915070	Pitt Meadows(CCS590215070)	5915070	4
	14	Polygon	5915075	Maple Ridge(CCS590215075)	5915075	2
	15	Polygon	5929018	Sunshine Coast A(CCS590229018)	5929018	3
	16	Polygon	5931021	Squamish-Lillooet D(CCS590231021)	5931021	13
	17	Polygon	5931034	Squamish-Lillooet B(CCS590231034)	5931034	3

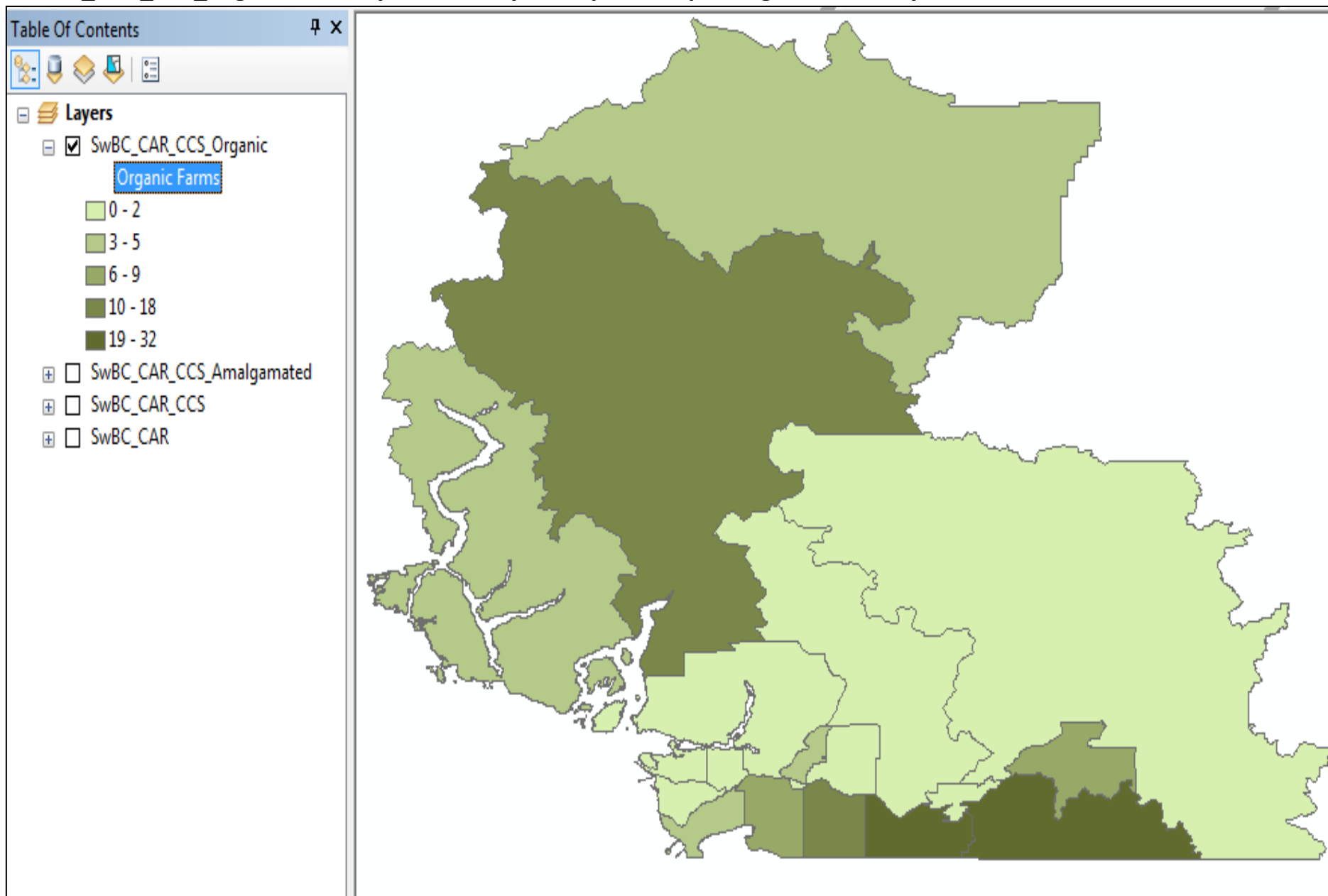
23. right-click SwBC_CAR_CCS_Amalamated to export data...



24. save as SwBC_CAR_CCS_Organic.shp and add to map



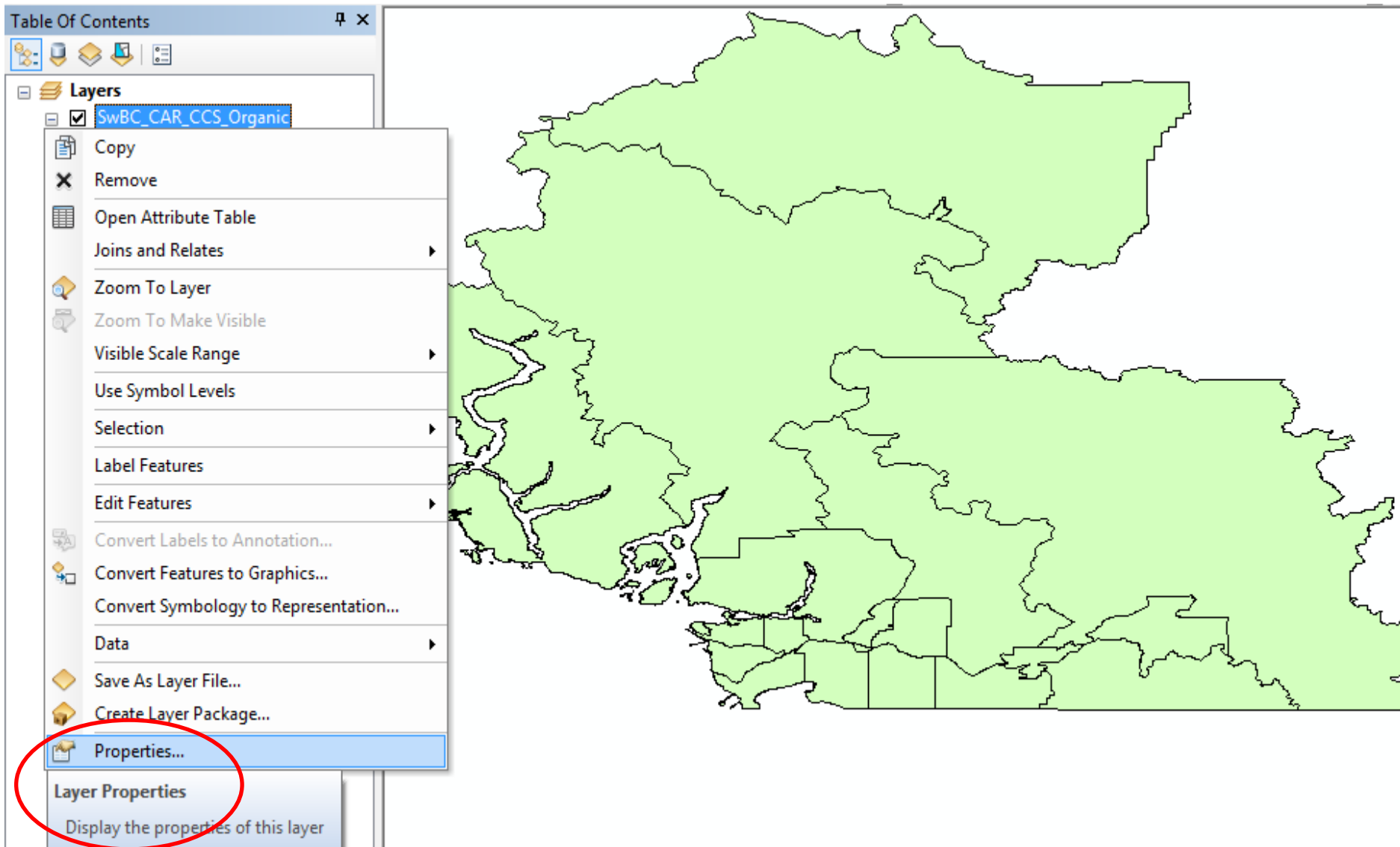
SwBC_CAR_CCS_Organic farms symbolized by choropleth map: “Organic Farms by CCSs” ...but...



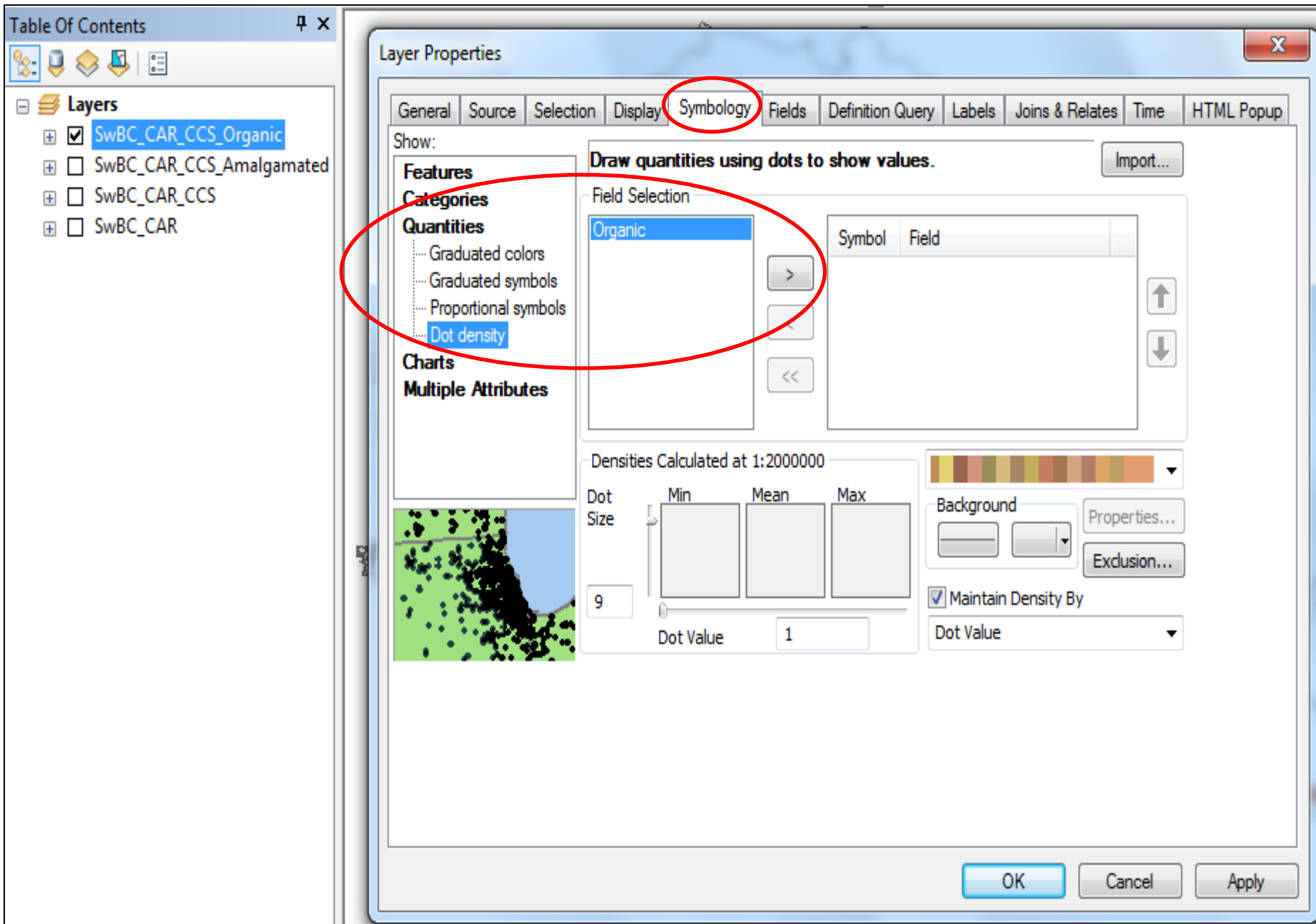
...Choropleth maps are usually better for relative numbers (ratios, percentages, etc) rather than absolute numbers...so...₂₇

Part C: Create Map(s)

1. double or right-click SwBC_CAR_CCS_Organic for Properties



2. in SwBC_CAR_CCS_Organic Layer Properties, click Symbology, Quantities, Dot Density, and move Organic...



3. (in SwBC_CAR_CCS_Organic Layer Properties) ...move Organic over to symbolize it

Table Of Contents

Layers

- ☒ SwBC_CAR_CCS_Organic
- ☐ SwBC_CAR_CCS_Amalgamated
- ☐ SwBC_CAR_CCS
- ☐ SwBC_CAR


Layer Properties

General Source Selection Display Symbology Fields Definition Query Labels Joins & Relates Time HTML Popup

Show:

Draw quantities using dots to show values. Import...

Field Selection


Symbol	Field
	Organic

Densities Calculated at 1:2000000

Dot Size: 9

Min Mean Max

Dot Value: 1

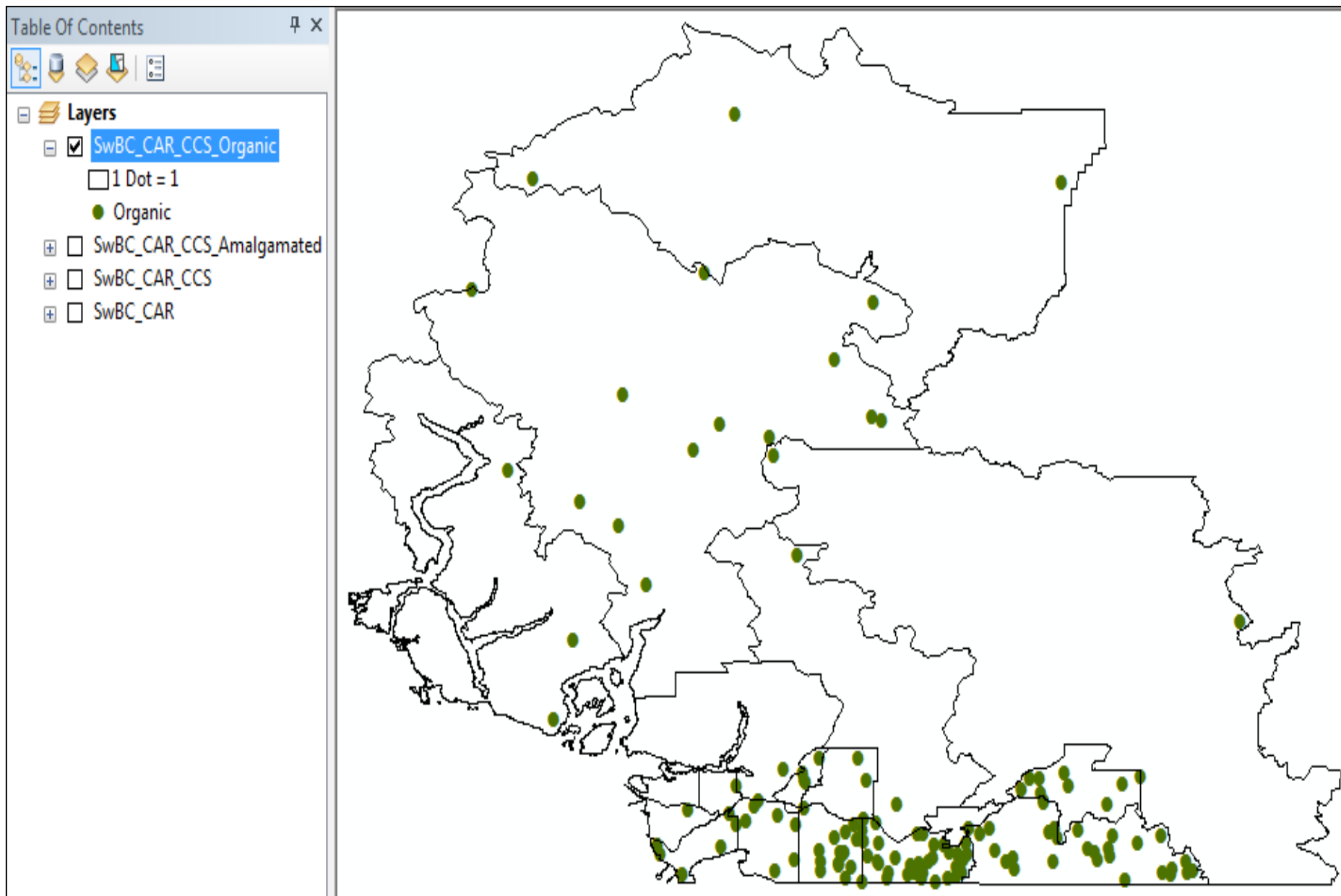
Background:  Properties... Exclusion...

☒ Maintain Density By Dot Value

OK Cancel Apply

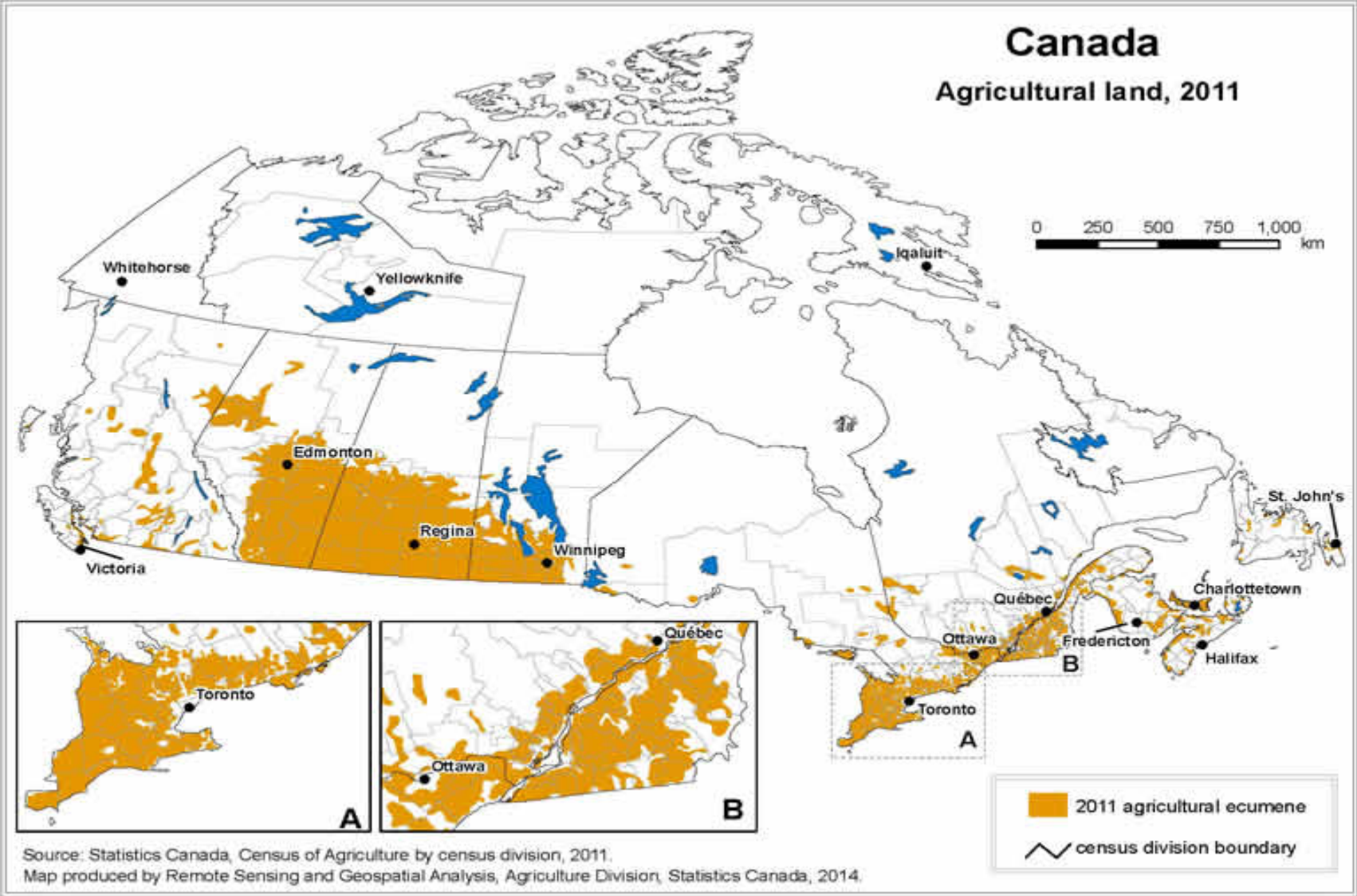
for display purposes, Dot size = 9 and Dot Value: 1 (1 dot = 1 farm); colour can be changed

Organic farms by CCS (by Dot Density within CCSs; dots do not indicate exact geographic location)...



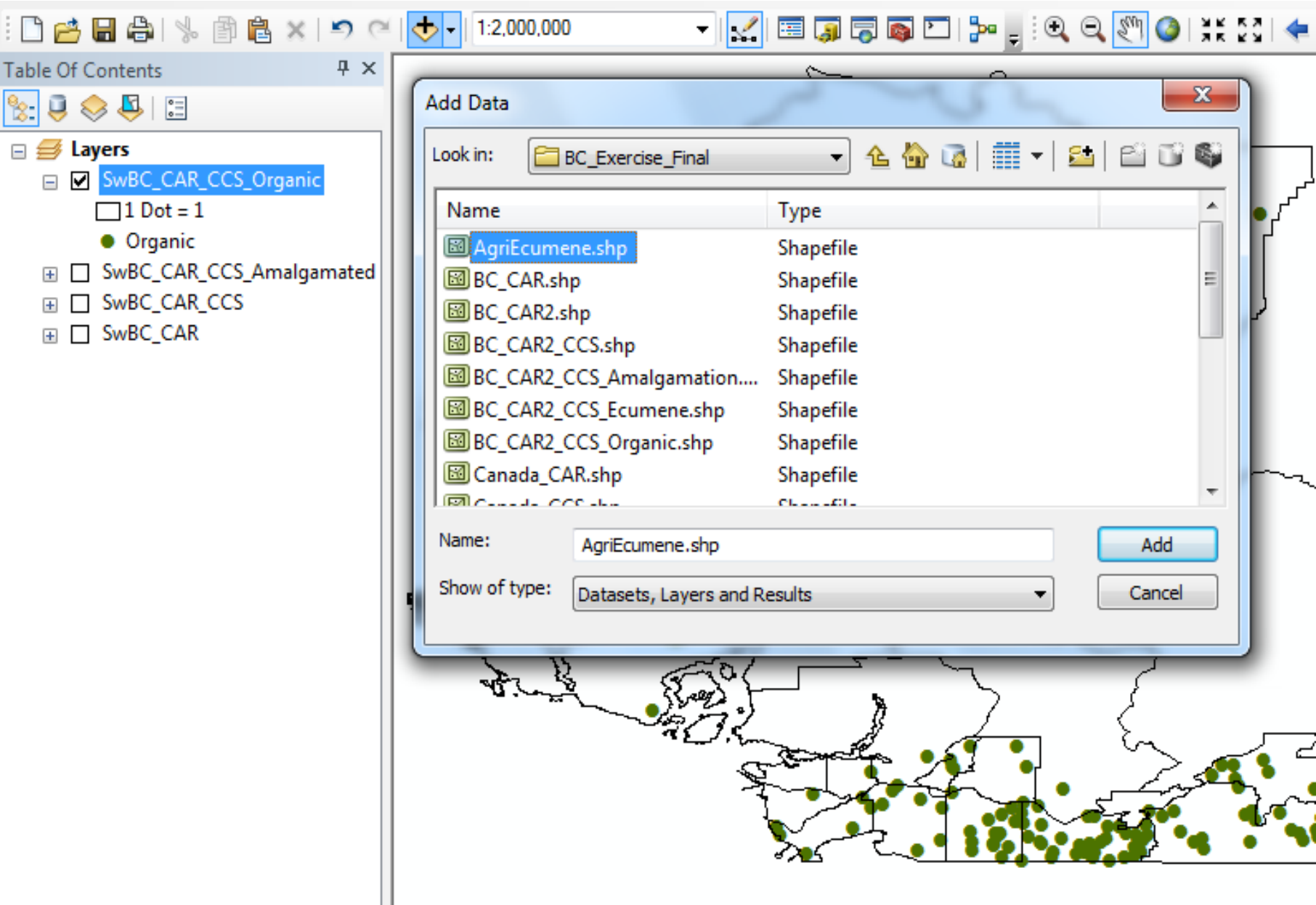
...but this visualization assumes farms are randomly distributed throughout their CCS areas which is not the case...
so Agricultural Ecumene Boundary File is useful...

AgricEcumene delineates areas of significant agricultural activity in Canada as indicated by the 2011 CensusAg

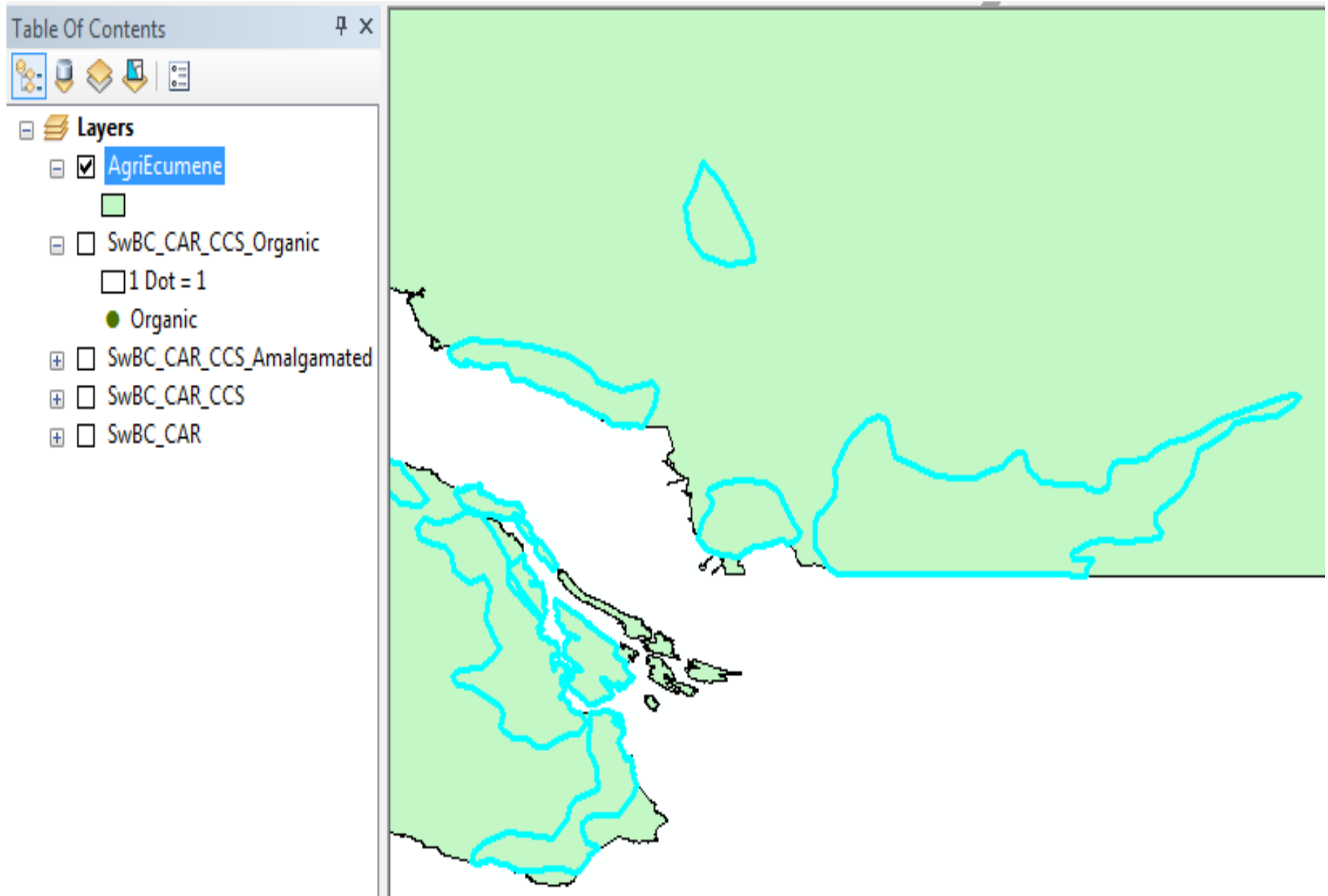


Most/much of Canada, and BC, does not have significant agricultural activity...

4. navigate to and Add AgriEcumene file



Note the limited areas of significant agricultural activity in Sw BC...(only highlighted here for visualization)



5. Need to Select by Attributes (...“ECUMENE” = ‘1’...next slide...)

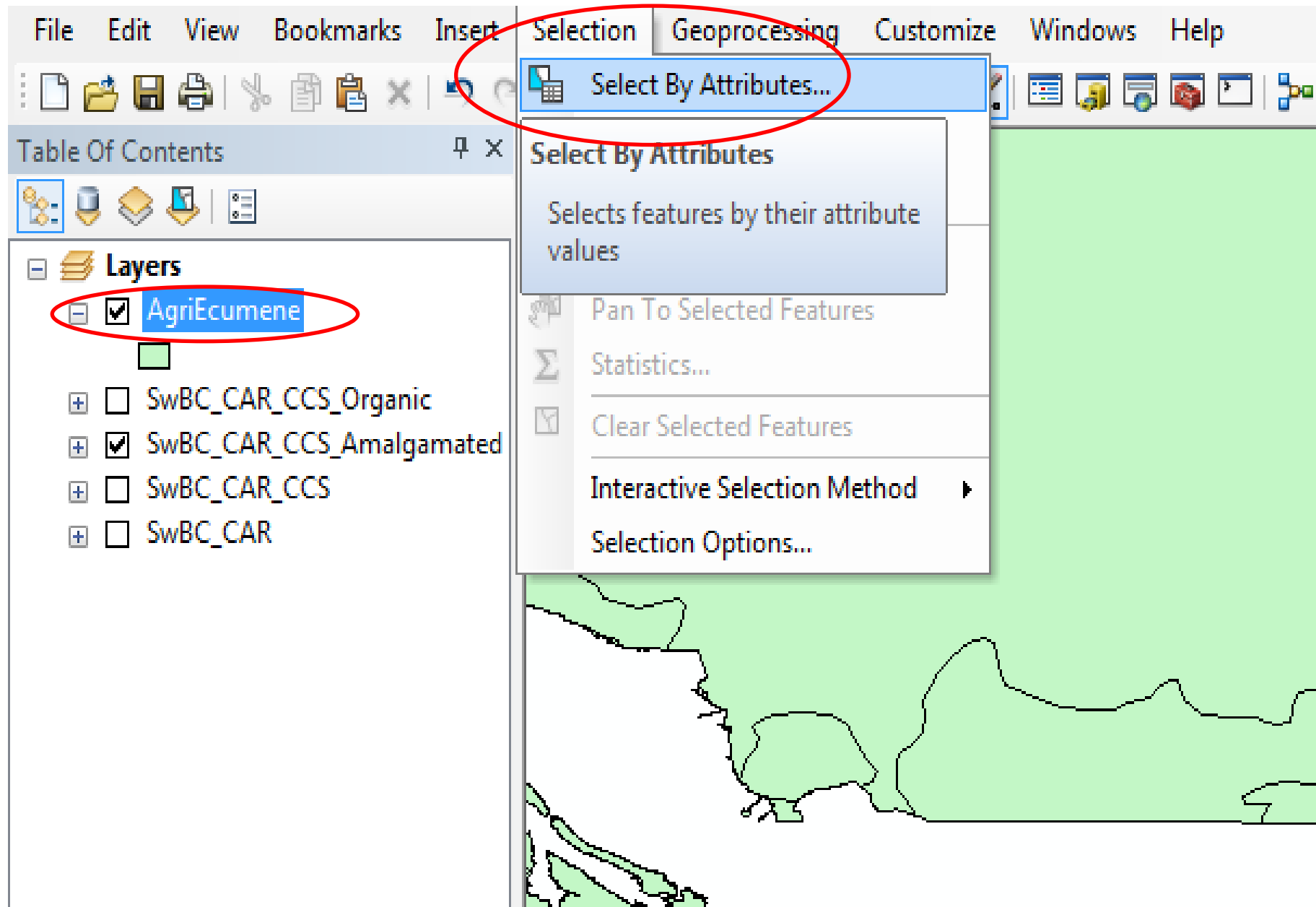


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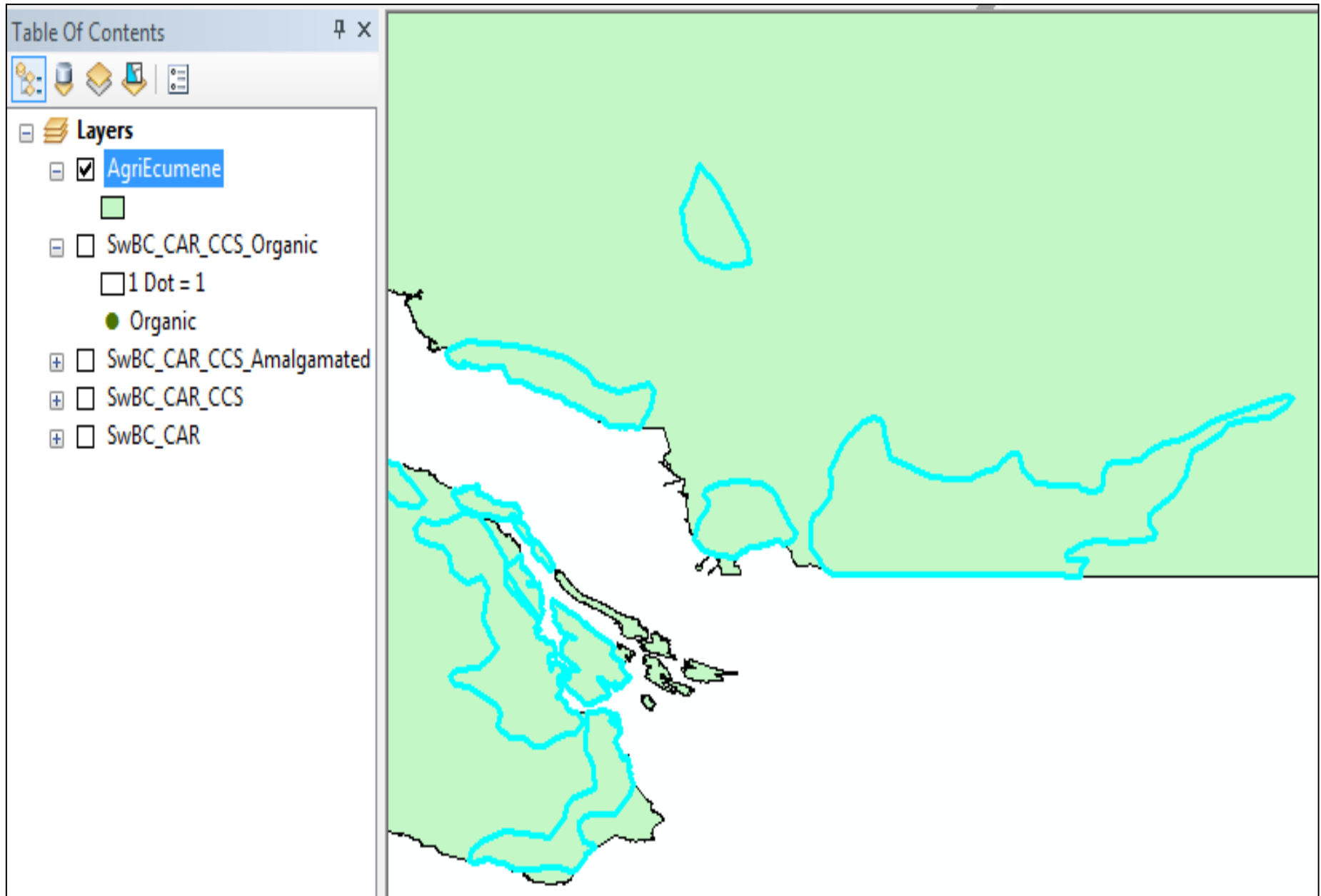
Layers

- ☒ AgriEcumene
- ☐ SwBC_CAR_CCS_Organic
 - ☐ 1 Dot = 1
 - ☒ Organic
- ☐ SwBC_CAR_CCS_Amalgamated
- ☐ SwBC_CAR_CCS
- ☐ SwBC_CAR

The screenshot shows the 'Select By Attributes' dialog box. The 'Layer' dropdown is set to 'AgriEcumene'. The 'Method' is 'Create a new selection'. The attribute table shows 'ECUMENE' with a value of '1'. The SQL expression is 'SELECT * FROM AgriEcumene WHERE: "ECUMENE" = '1''. The 'OK' button is highlighted.

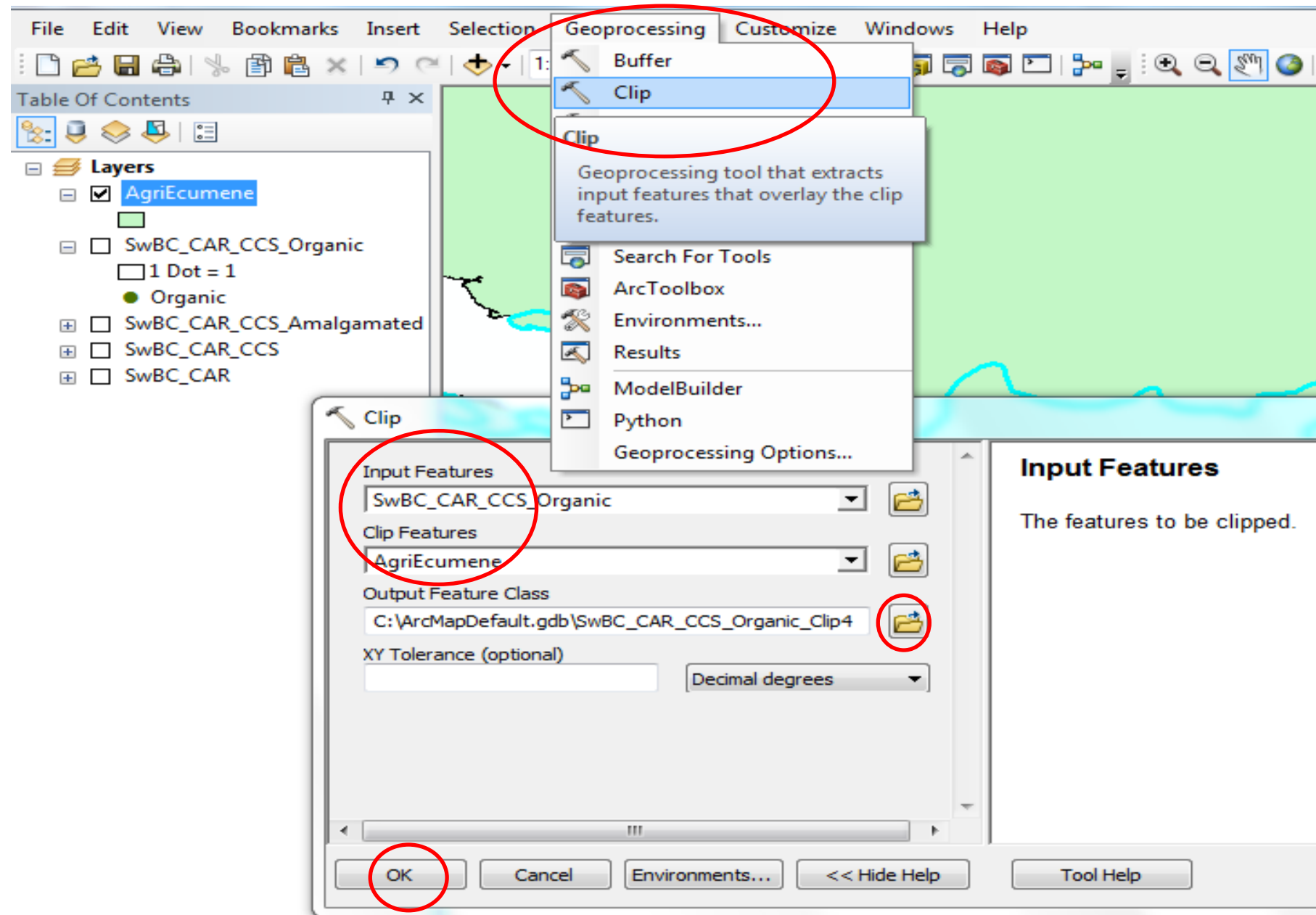
36

“ECUMENE” = ‘1’ selected...



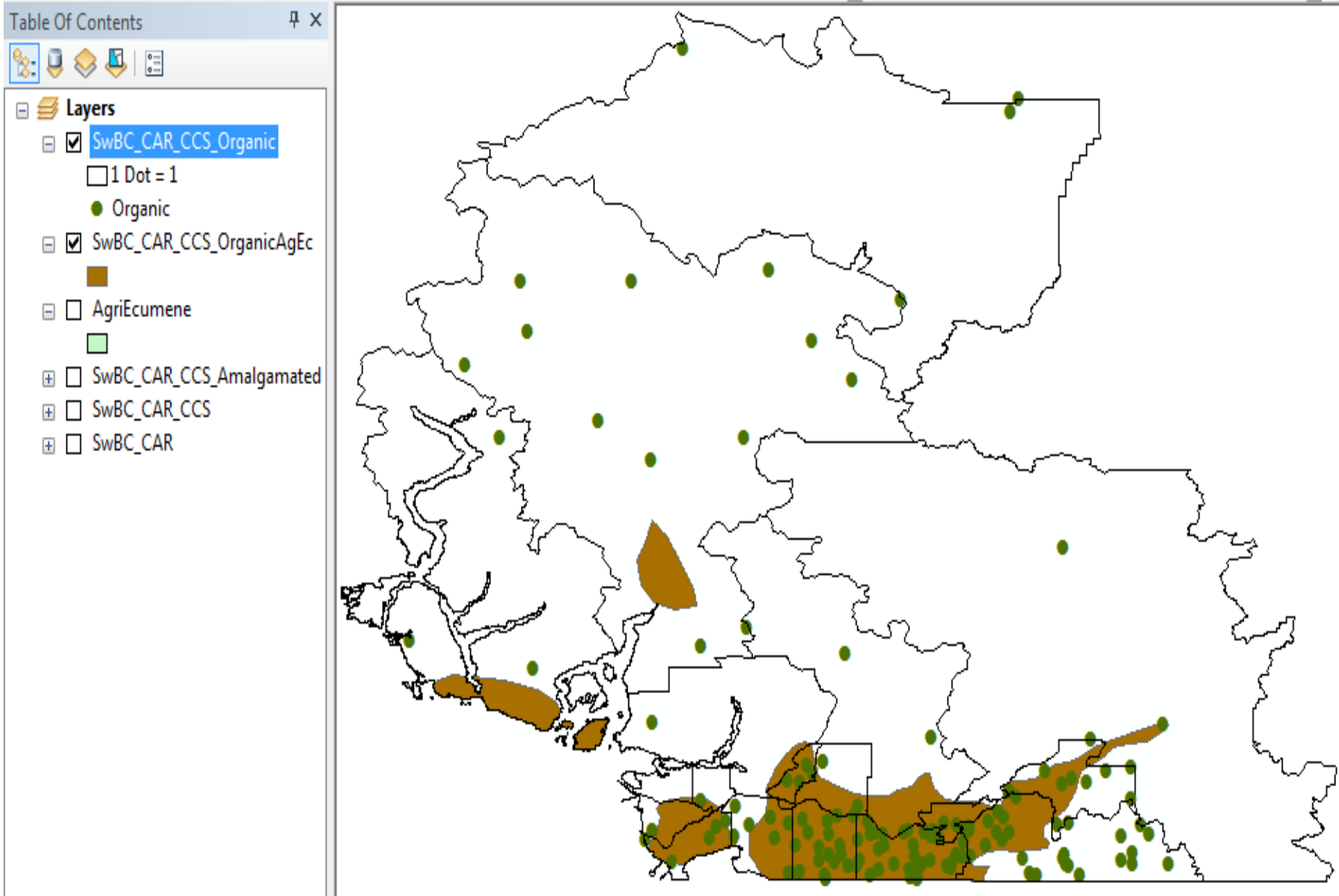
...now with above we will clip...

7. (under Geoprocessing use) Clip SwBC_CAR_CCS_Organic using AgriEcumene...



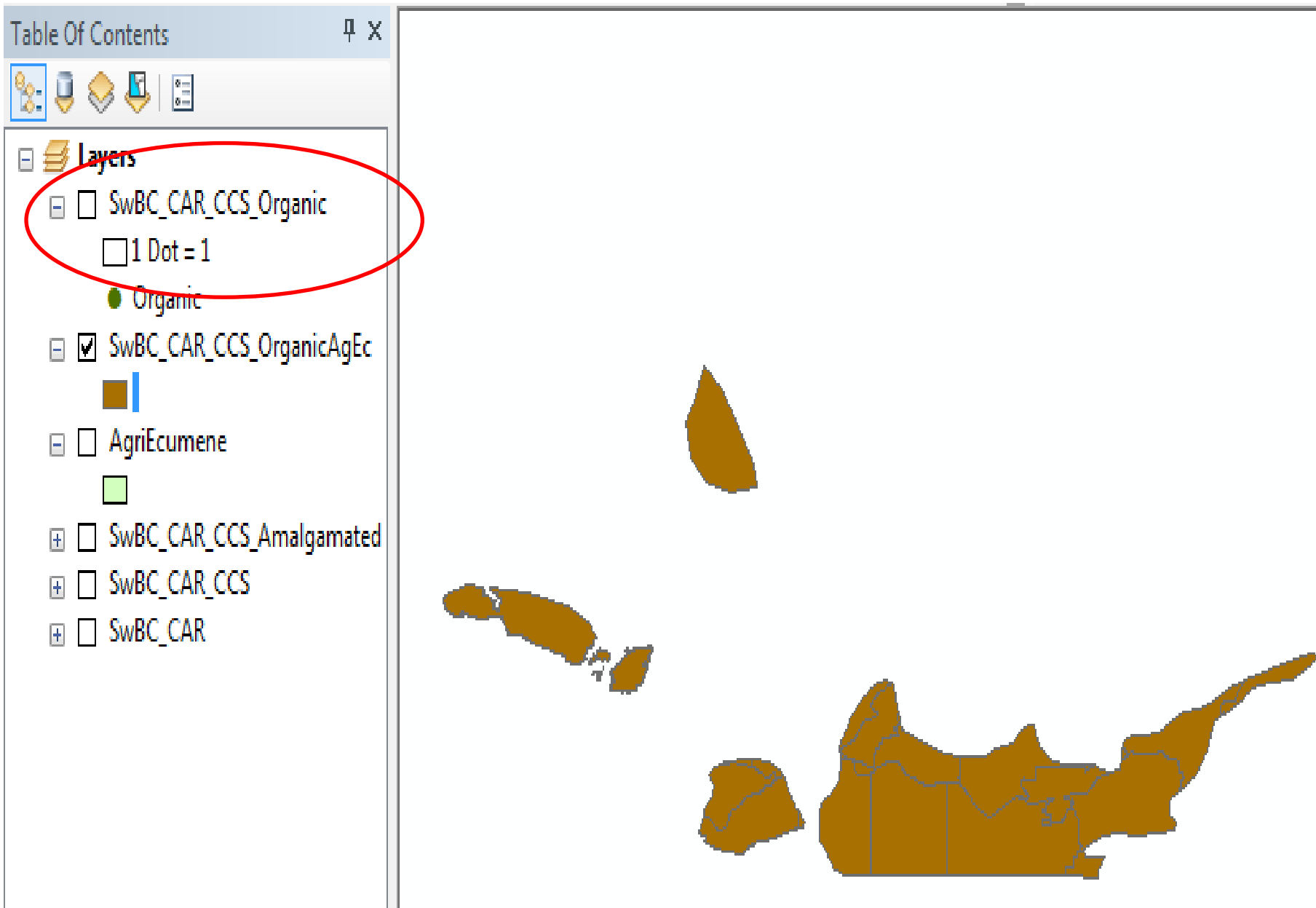
...save file as SwBC_CAR_CCS_OrganicAgEc...

8. un-click AgriEcumene and move SwBC_CAR_CCS_Organic to top of Table of Contents
“Organic Farms in SwBC by CCS (by Dot Density within CCSs over AgriEcumene)”



Note how many/some of the organic farms in SwBC_CAR_CCS_Organic are outside the AgriEcumene areas...

9. un-click SwBC_CAR_CCS_Organic b/c we will now symbolize SwBC_CAR_CCS_OrganicAgEc...next slide...



10. symbolize SWBC_CAR_CCS_OrganicAgEc with dot density: Layer Properties–Symbology–Quantities-Dot Density, and move Organic to symbolize it by Dot Density

The screenshot shows the QGIS interface with the 'Layer Properties' dialog box open for the 'SwBC_CAR_CCS_OrganicAgEc' layer. The 'Symbology' tab is selected, and the 'Quantities' section is expanded, showing 'Dot density' as the chosen symbology. The 'Field Selection' table shows 'Organic' as the field to be symbolized. The 'Dot Size' is set to 9, and the 'Dot Value' is set to 1. A small preview map shows the layer's distribution. The 'Table Of Contents' panel on the left shows the layer hierarchy.

Table Of Contents

- SwBC_CAR_CCS_Organic
 - 1 Dot = 1
 - Organic
- SwBC_CAR_CCS_OrganicAgEc
- AgriEcumene
- SwBC_CAR_CCS_Amalgamated
- SwBC_CAR_CCS
- SwBC_CAR

Layer Properties

General | Source | Selection | Display | **Symbology** | Fields | Definition Query | Labels | Joins & Relates | Time | HTML Popup

Show:

Features

Categories

Quantities

- Graduated colors
- Graduated symbols
- Proportional symbols
- Dot density**

Charts

Multiple Attributes

Draw quantities using dots to show values. Import...

Field Selection

Symbol	Field
	Organic

Densities Calculated at 1:2000000

Dot Size: 9

Dot Value: 1

Min:

Mean:

Max:

Background:

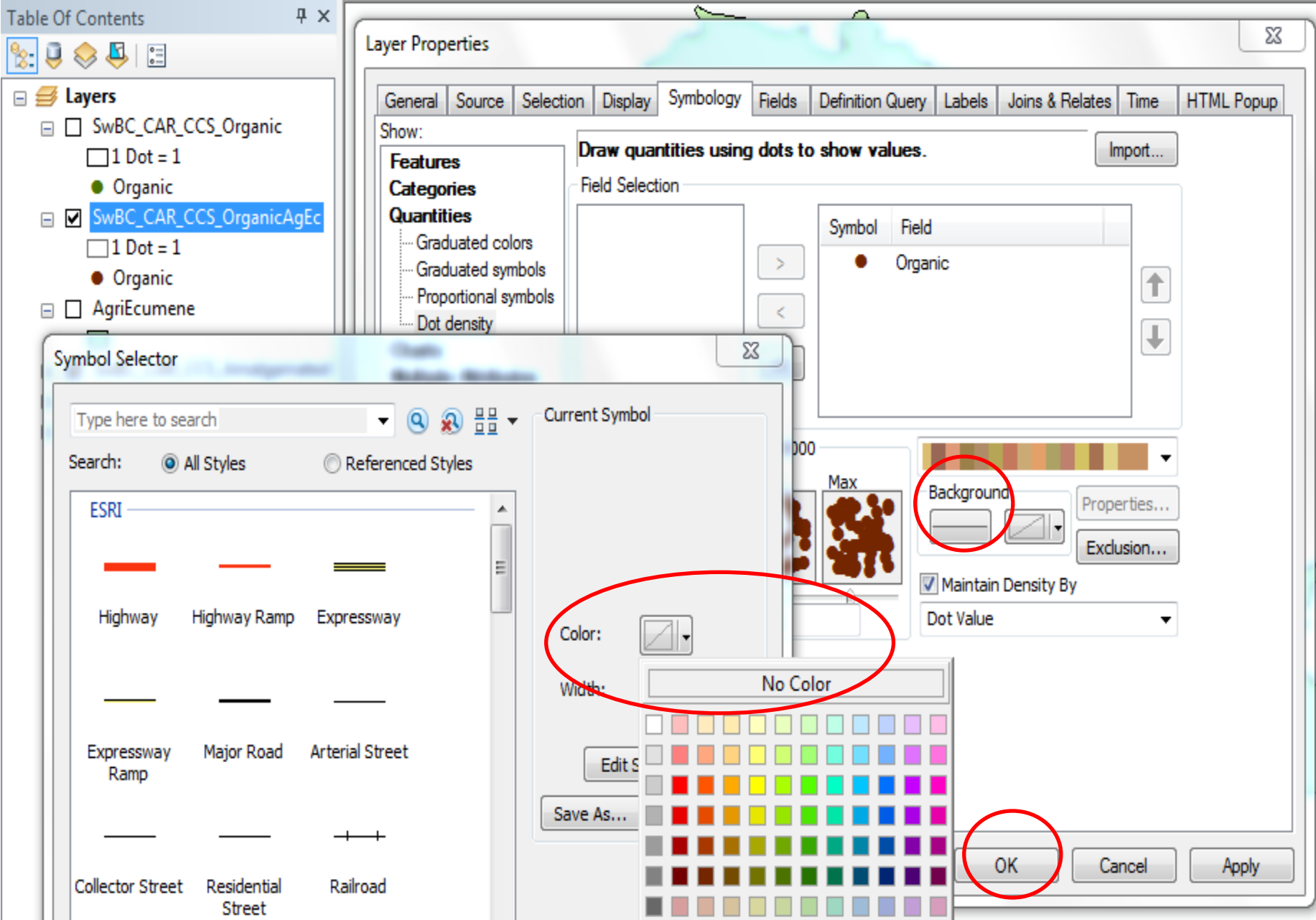
Properties... Exclusion...

☒ Maintain Density By: Dot Value

OK Cancel Apply

for display purposes, Dot size = 9 and Dot Value: 1 (1 dot = 1 farm); colour can be changed and...see next page...

11. ...set Background to No Colour; OK



Organic Farms in SwBC by Agricultural Ecumene (by Dot Density)

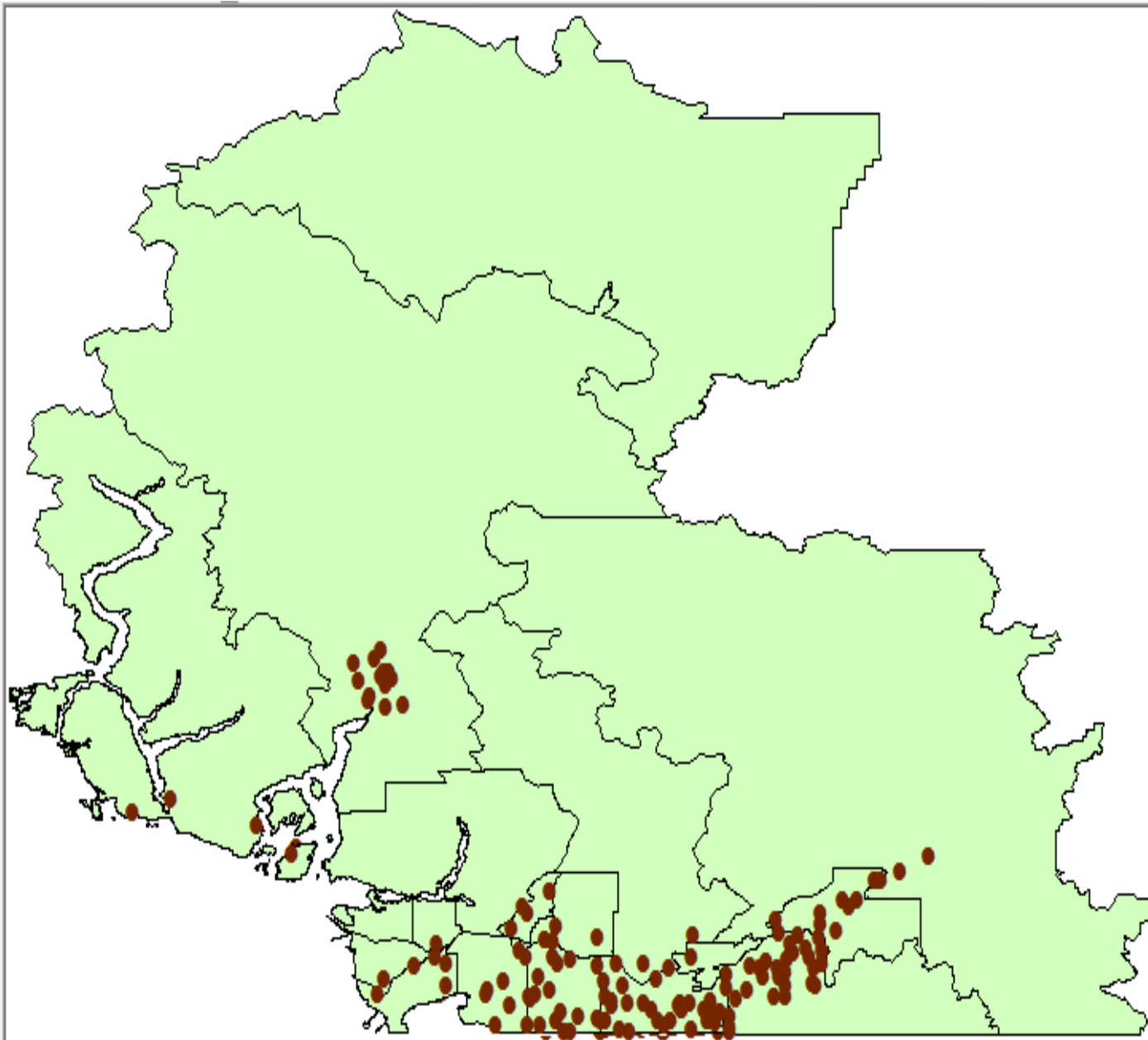
Table Of Contents

✕



Layers

- ☐ SwBC_CAR_CCS_Organic
- ☒ SwBC_CAR_CCS_OrganicAgEc
 - 1 Dot = 1
 - Organic
- ☐ AgriEcumene
 -
- ☒ SwBC_CAR_CCS_Amalgamated
- ☐ SwBC_CAR_CCS
- ☐ SwBC_CAR






Compare to map on next slide 44

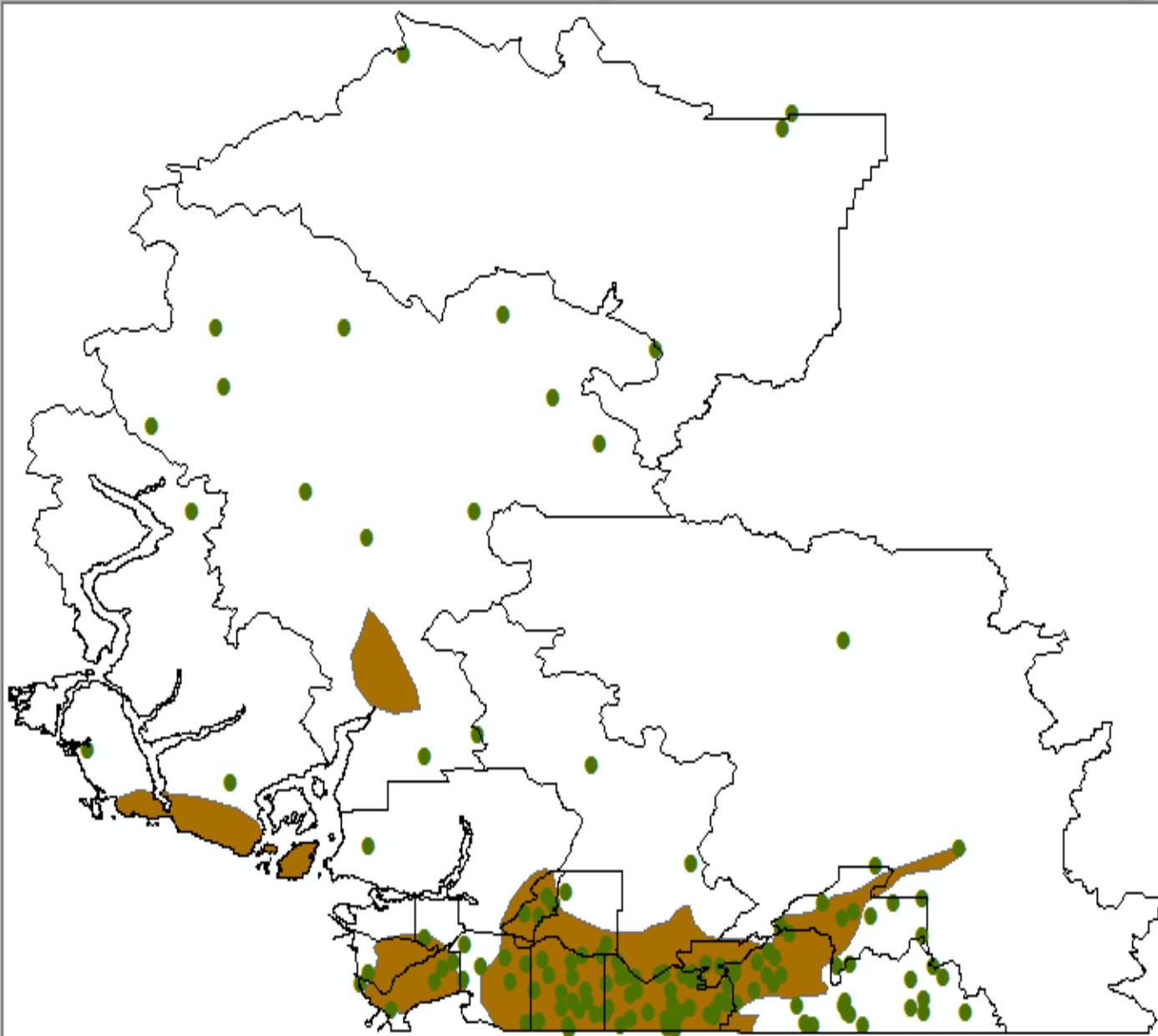
Organic Farms in SwBC by CCS (by Dot Density within CCSs over AgriEcumene)

Table Of Contents



Layers

- ☒ SwBC_CAR_CCS_Organic
 - ☐ 1 Dot = 1
 -  Organic
- ☒ SwBC_CAR_CCS_OrganicAgEc
 - 
- ☐ AgriEcumene
 - 
- ☐ SwBC_CAR_CCS_Amalgamated
- ☐ SwBC_CAR_CCS
- ☐ SwBC_CAR



Note: This is slide 39 with organic farms within CCSs