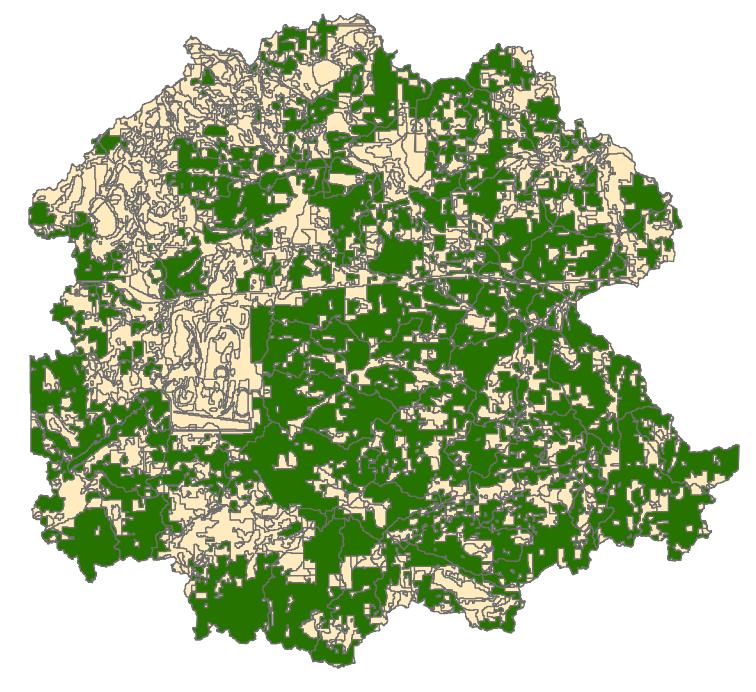
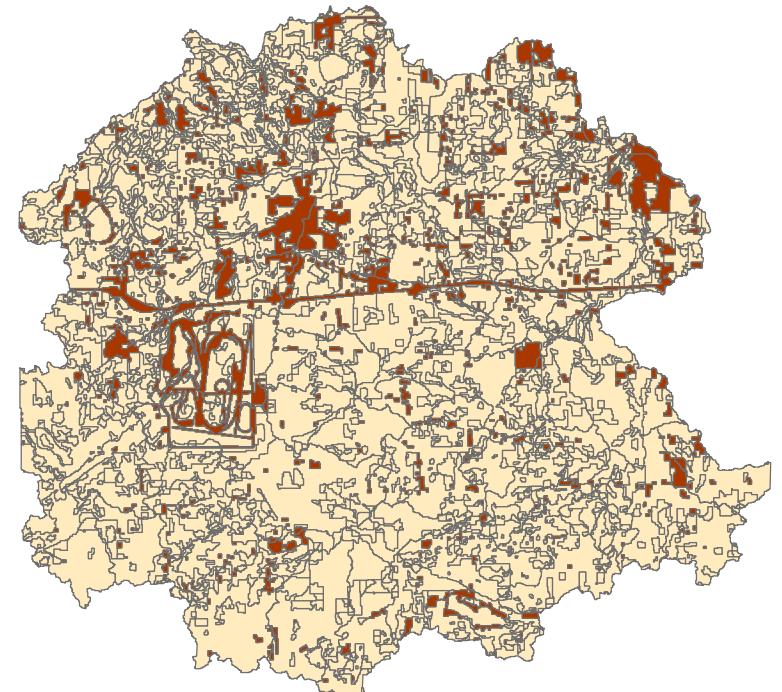
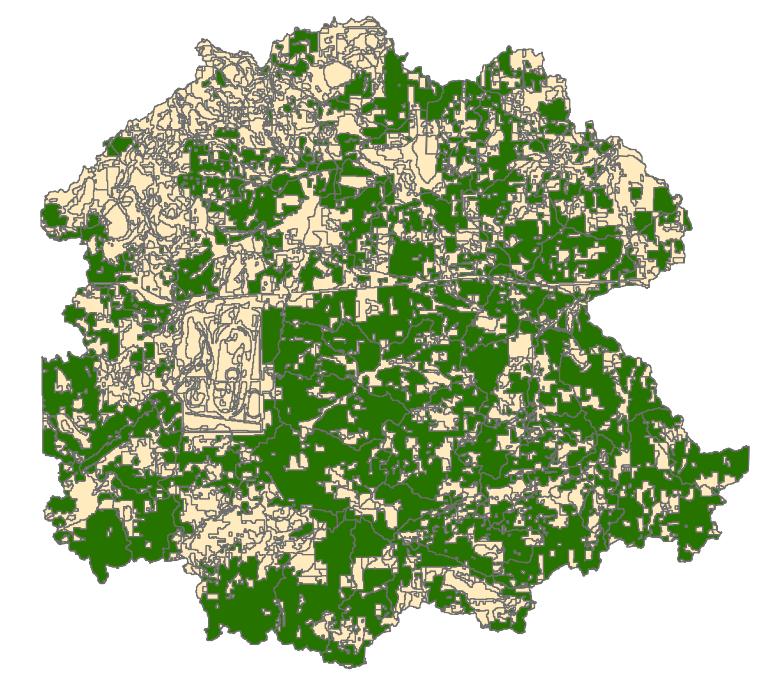


Urban and Built Up Land
(represented in red)
increased by 42.08%
in Mill Creek Watershed
from 285023000 sq ft in 1985
to 404968000 sq ft in 1995



Agricultural Land
(represented in green)
is the predominant land use
within Mill Creek Watershed,
and has decreased by 3.10%
from 2061988000 sq ft in 1985
to 1998010000 sq ft in 1995



1.

Dissolve: Used to assess values on either side of a boundary line. If they are the same, the boundary line is removed, simplifying the coverage by removing unnecessary information. Attribute data is reclassified into the new polygons in the output.

Clip: Only retains the region within the bounds of a specified polygon. There is no transfer of attribute data from the overlay to the output data. Attribute data does not include the defined polygon boundaries.

Intersect: Combines data from layers, only displaying areas where both layers contain data. Output attribute data consists of both input and boundary layer attributes in newly merged coverage.

Union: Includes all attribute data from boundary and input data layers. Creates new polygons from combined spatial data.

2.

a.

The units of the statistics are in feet, you can find this information by going to the properties of the data layer and looking at the source data units.

b.

Land Cover	1985 sq ft	1985 acres	1995 sq ft	1995 acres	Actual change (acre)	% change
Agricultural_Land	2061988000	47000	1998010000	46000	-1469	-3.10
Forest_Land	450774000	10000	436943000	10000	-318	-3.07
Rangeland	631305000	14000	592340000	14000	-895	-6.17
Urban_and_Built_Up	285023000	7000	404968000	9000	2754	42.08
Water	85802000	2000	85952000	2000	3	0.17
Wetlands	496346000	11000	493026000	11000	-76	-0.67

c.

These statistics show that there has been a drastic increase in Urban and Built Up land acreage over the 10 year period. It also shows a noticeable decrease in Agricultural Land and Rangeland acreage.

3.

LEVEL1_LAB	Cnt_LEVEL1_LAB	Sum_Shape_Area_85	Sum_Shape_Area_95	% change
Agricultural_Land	39	168419118.892708	162092892.275721	-3.75624
Forest_Land	102	28230239.492326	27786199.710707	-1.57292
Rangeland	138	71865790.850187	67633896.882739	-5.88861
Urban_and_Built_Up	60	22816486.365760	34318550.673316	50.4112

Water	22	12056244.941509	12055877.484320	-0.00305
Wetlands	107	61865984.338691	61366442.218436	-0.80746

The predominant land use within the Mill Creek buffer in both 1985 and 1995 was Agricultural Land. Urban and Built Up Land had the highest percentage change over this time period.

4.

Land Use for 5 basins in 1985:

OBJECTID	BASINS_ID	Cnt_BASINS_ID	Sum_Shape_Area
1	1	43	418348315.521153
2	2	49	340571097.341883
3	3	25	453318793.292470
4	4	41	560385550.981219
5	5	61	289364618.082161

Land Use for 5 basins in 1995:

OBJECTID	BASINS_ID	Cnt_BASINS_ID	Sum_Shape_Area
1	1	64	398732061.702091
2	2	58	318541283.835977
3	3	35	444745810.095483
4	4	51	557219990.716698
5	5	81	278770674.988156

Summary:

BASINS_ID	Sum_Shape_Area_85	Sum_Shape_Area_95	% change
1	418348315.521153	398732061.702091	-4.68898
2	340571097.341883	318541283.835977	-6.46849
3	453318793.292470	444745810.095483	-1.89116
4	560385550.981219	557219990.716698	-0.56489
5	289364618.082161	278770674.988156	-3.66111

Basin 4 had the most agricultural land in both 1985 and 1995. Basin 2 experienced the largest percent change between the two time periods.