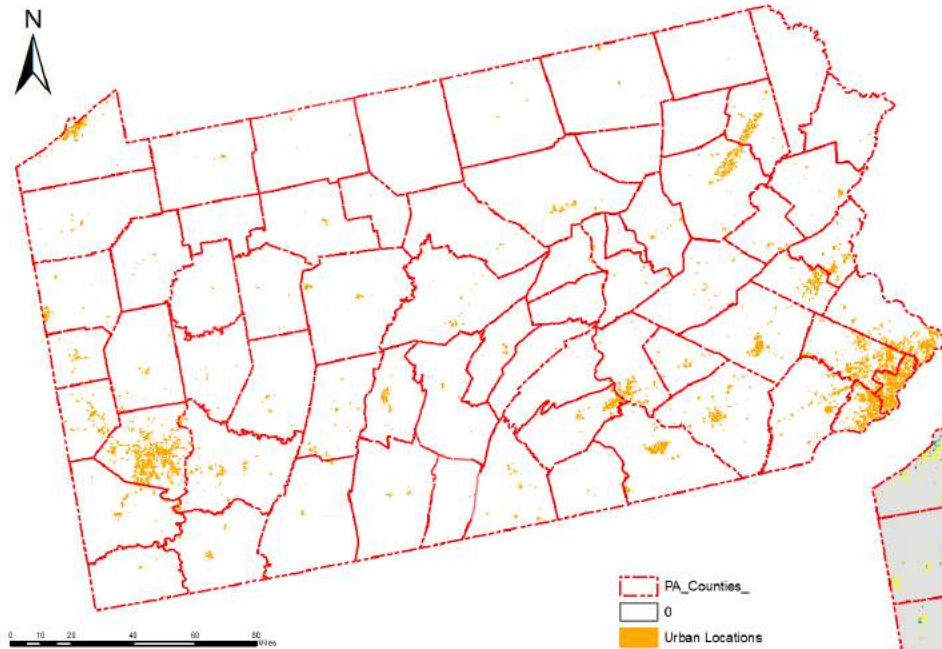
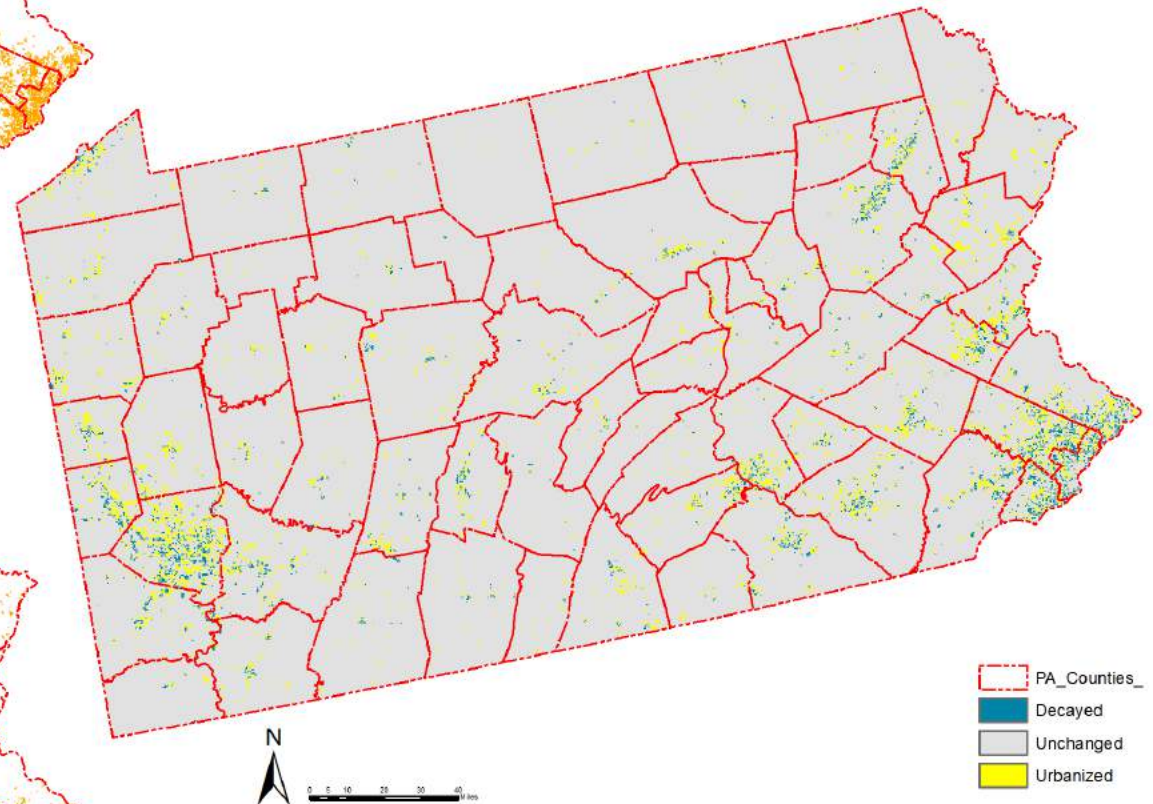
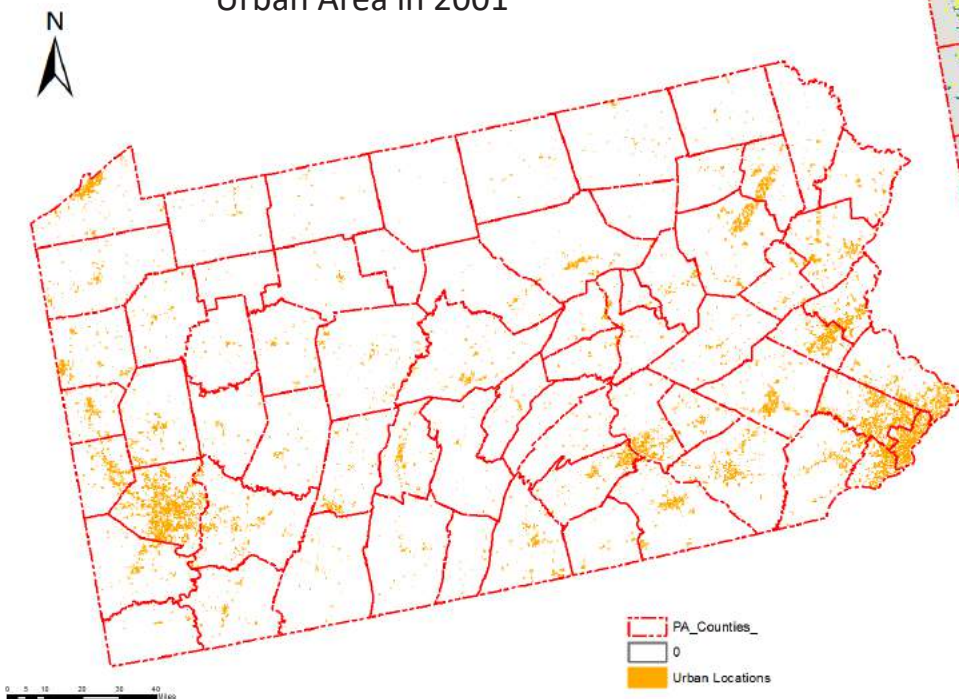


Shu Xingxing

Urban Area in 1992



Urban Area in 2001



Urbanized Area btw 1992 & 2001

Table of Population & Urban Land Change

NAME	Population_2000	Population_1990	population_grow	Urban Land Change (Acres)	Urban Land Change/Pop Change
Erie	293750	287786	5964	17976.09	3.014099059
Bradford	83154	76463	6691	5559.61	0.83
Tioga	53591	51930	1661	4200.60	2.53
Potter	26441	24743	1698	803.06	0.47
McKean	60363	60010	353	3274.00	9.27
Warren	63964	58708	5256	3891.73	0.74
Wayne	86914	66846	20068	4880.11	0.24
Susquehanna	60530	53528	7002	4200.60	0.60
Crawford	111719	106933	4786	11984.06	2.50
Wyoming	54443	49009	5434	2965.13	0.55
Lackawanna	244972	244913	59	13775.49	233.48
Elk	51694	49608	2086	2470.94	1.18
Forest	19301	14285	5016	803.06	0.16
Venango	84063	82208	1855	6300.90	3.40
Cameron	20623	13353	7270	185.32	0.03
Pike	80014	49274	30740	8030.55	0.26
Lycoming	152052	140904	11148	11613.42	1.04
Sullivan	20698	16518	4180	679.51	0.16
Mercer	144514	140380	4134	15937.56	3.86
Clinton	60008	56125	3883	4015.20	1.03
Clarion	64406	64796	-390	4694.79	-12.04
Luzerne	362616	371975	-9359	18284.95	-1.95
Jefferson	69597	68679	918	5621.39	6.12
Columbia	99147	92573	6574	6362.67	0.97
Clearfield	114530	102981	11549	11798.74	1.02
Centre	171642	152474	19168	12478.25	0.65
Monroe	170047	119982	50065	25697.77	0.51
Northumberland	144797	144498	299	6115.58	20.45
Butler	220140	193661	26479	19273.33	0.73
Montour	36719	32462	4257	1667.88	0.39
Armstrong	117142	113010	4132	6115.58	1.48
Union	71752	63169	8583	3953.50	0.46
Carbon	103455	92643	10812	7227.50	0.67
Lawrence	114473	110888	3585	13404.85	3.74
Northampton	315951	289933	26018	17543.67	0.67
Schuylkill	189890	186610	3280	7536.37	2.30
Indiana	120421	120532	-111	5436.07	-48.97
Snyder	59828	55613	4215	3891.73	0.92
Beaver	213903	219407	-5504	20570.57	-3.74
Millin	69948	67641	2307	3644.64	1.58
Lehigh	383167	355317	27850	21620.72	0.78
Huntingdon	84365	75275	9090	2718.03	0.30
Blair	159809	157452	2357	10501.49	4.46
Cambria	188460	200643	-12183	11428.10	-0.94
Juniata	45552	40755	4797	1482.56	0.31
Westmoreland	468898	473872	-4974	24894.72	-5.00
Berks	440496	403583	36913	21002.99	0.57
Allegheny	1378735	1433858	-55123	77216.87	-1.40
Dauphin	298414	289660	8754	20014.61	2.29
Perry	89418	87675	1743	3521.09	2.02
Bucks	685303	646510	38793	28354.03	0.73
Lebanon	153844	151136	2708	8957.16	3.31
Washington	250190	260626	-10436	17234.80	-1.65
Montgomery	899423	874661	24762	44044.50	1.78
Cumberland	267441	240912	26529	16555.30	0.62
Bedford	70703	68439	2264	4077.05	1.80
Lancaster	532091	480036	52055	24585.85	0.47
Franklin	154638	144153	10485	13157.75	1.25
Somerset	110317	102414	7903	5312.52	0.67
Chester	511566	457940	53626	20570.57	0.38
York	447120	389078	58042	15814.01	0.27
Fulton	27625	26692	933	2409.17	2.58
Fayette	194445	189955	4490	10377.95	2.31
Philadelphia	1582275	1651215	-68940	12910.66	-0.19
Adams	130869	107680	23189	4880.11	0.21
Delaware	595413	594716	697	14455.00	20.74
Greene	58651	56749	1902	3397.54	1.79

The county lost the most population are Philadelphia & Allegheny, while Allegheny has the most urbanized areas.

Urbanized areas in all counties of Pennsylvania are increased in past decade though some counties lost thousands of residents.

Sensitive Land in 1992

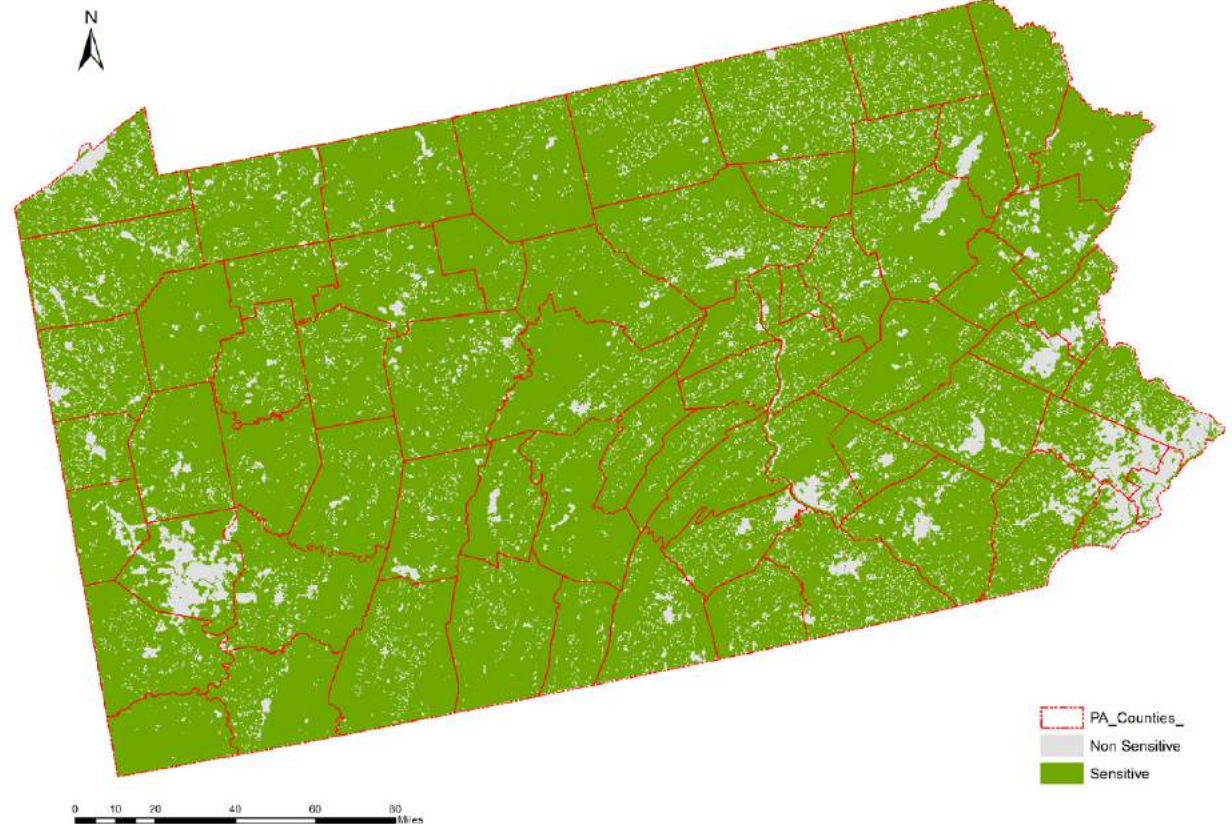


Table of Sensitive Lands

NAME	Sensitive Lands (Acres) In 1992	Grid Cells
Erie	367490.5165	5949
Bradford	572207.876	9264
Tioga	589010.2664	9536
Potter	588886.7194	9534
McKean	528781.1097	8560
Warren	459780.1167	7443
Wayne	396091.6443	6412
Susquehanna	415488.5214	6726
Crawford	501847.8662	8124
Wyoming	198601.7836	3215
Lackawanna	220284.28	3566
Elk	428152.0377	6931
Forest	231156.415	3742
Venango	375891.7117	6085
Cameron	218554.6222	3538
Pike	302010.6127	4889
Lycoming	633857.8231	10262
Sullivan	234430.4102	3795
Mercer	327461.2923	5301
Clinton	485724.9843	7863
Clarion	312265.0128	5055
Luzerne	448846.2083	7266
Jefferson	349329.1092	5655
Columbia	240113.5716	3887
Clearfield	600438.3628	9721
Centre	588392.6315	9526
Monroe	300960.4633	4872
Northumberland	238569.2343	3862
Butler	409928.907	6636
Montour	65912.31822	1067
Armstrong	362239.7695	5864
Union	164811.6823	2658
Carbon	204779.133	3315
Lawrence	173954.1594	2816
Northampton	167344.3956	2709
Schuylkill	419936.213	6798
Indiana	451131.8275	7303
Snyder	166664.8871	2698
Beaver	218183.9812	3532
Mifflin	220963.7885	3577
Lehigh	139361.0027	2256
Huntingdon	483562.912	7828
Blair	275756.8777	4464
Cambria	359151.0948	5814
Juniata	209473.9186	3391
Westmoreland	526495.4904	8523
Berks	417588.8202	6760
Allegheny	253518.4199	4104
Dauphin	256112.9066	4146
Perry	298427.7501	4831
Bucks	233997.9957	3788
Lebanon	179204.9064	2901
Washington	445386.8926	7210
Montgomery	147823.9714	2393
Cumberland	255680.4922	4139
Bedford	551390.2085	8927
Lancaster	488319.471	7905
Franklin	386640.2997	6259
Somerset	580979.7122	9406
Chester	349576.2032	5659
York	433649.9287	7020
Fulton	235851.2005	3818
Fayette	424816.3191	6877
Philadelphia	17667.21932	286
Adams	267664.55	4333
Delaware	53742.93988	870
Greene	321222.1694	5200

Urban growth in Allegheny was the most threatening to sensitive lands in 1992.

Then follows Westmoreland, Lancaster, Montgomery and Monroe.

Urbanized Sensitive Lands

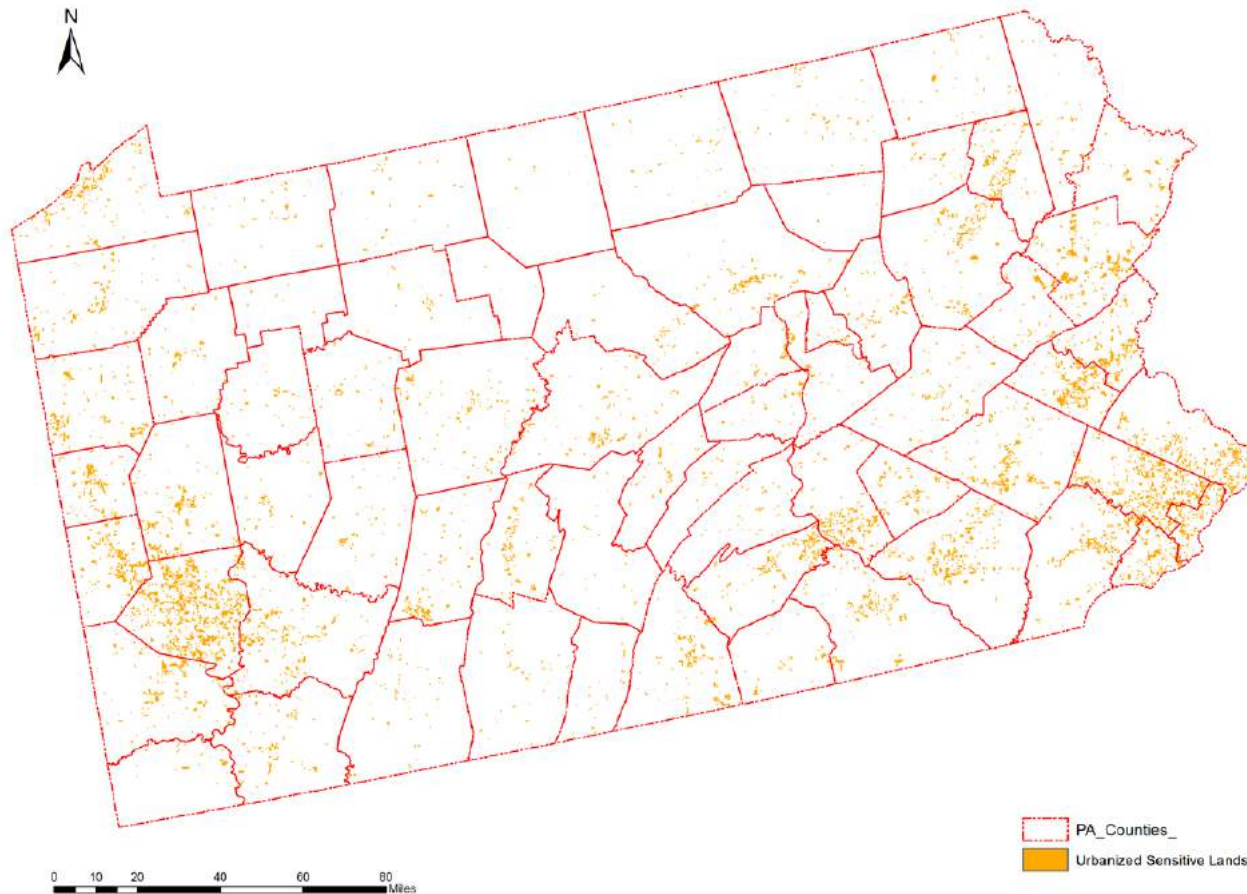
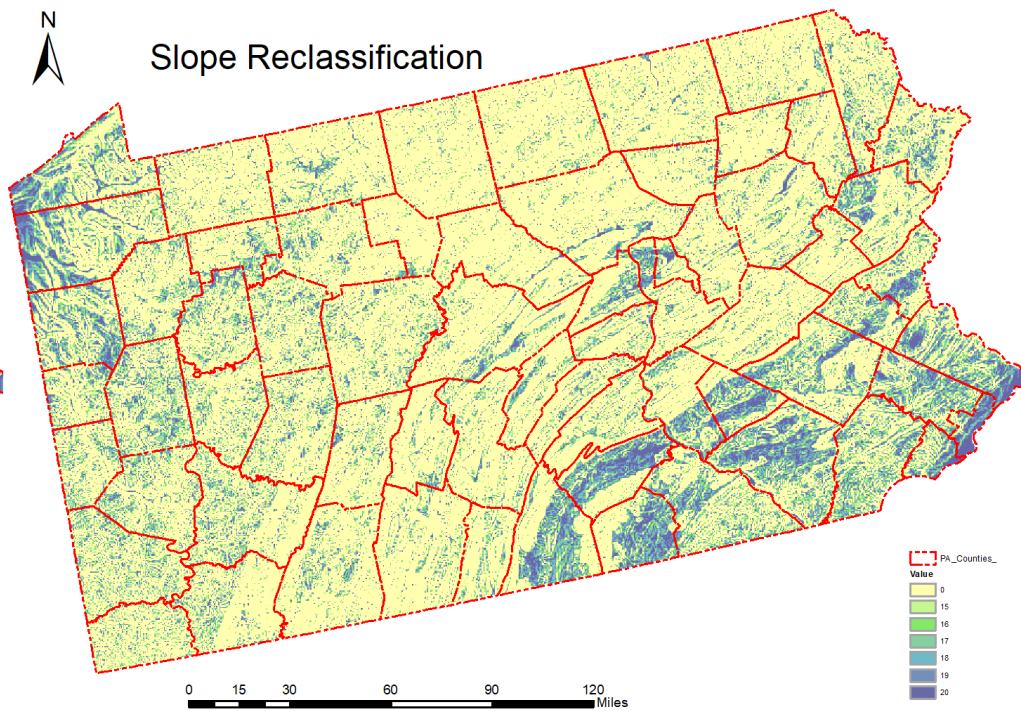
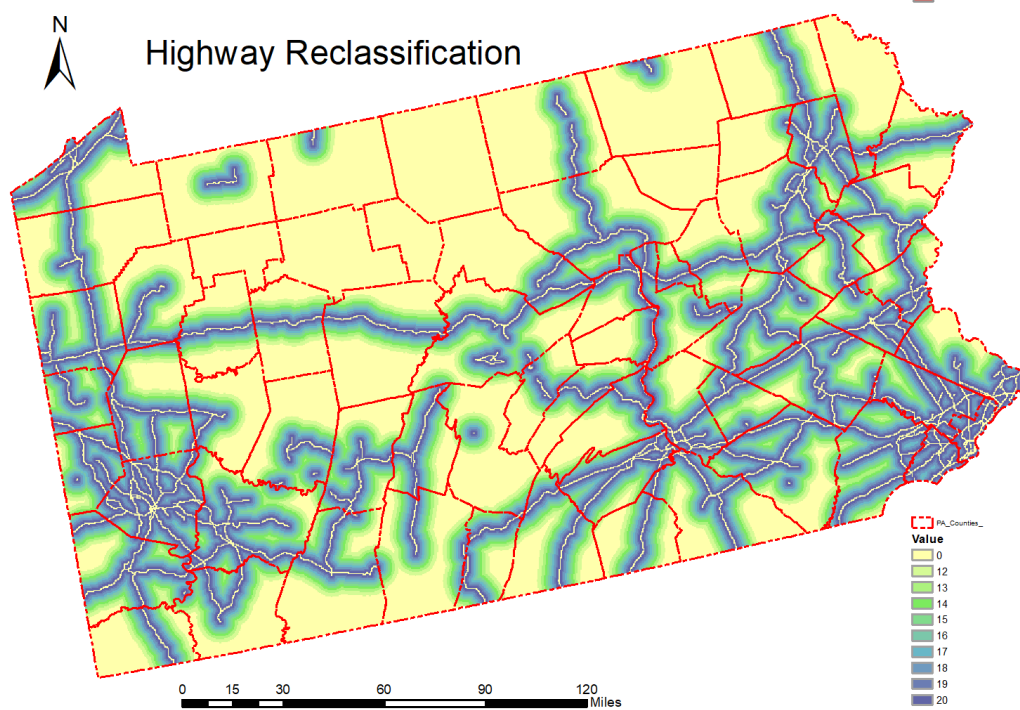
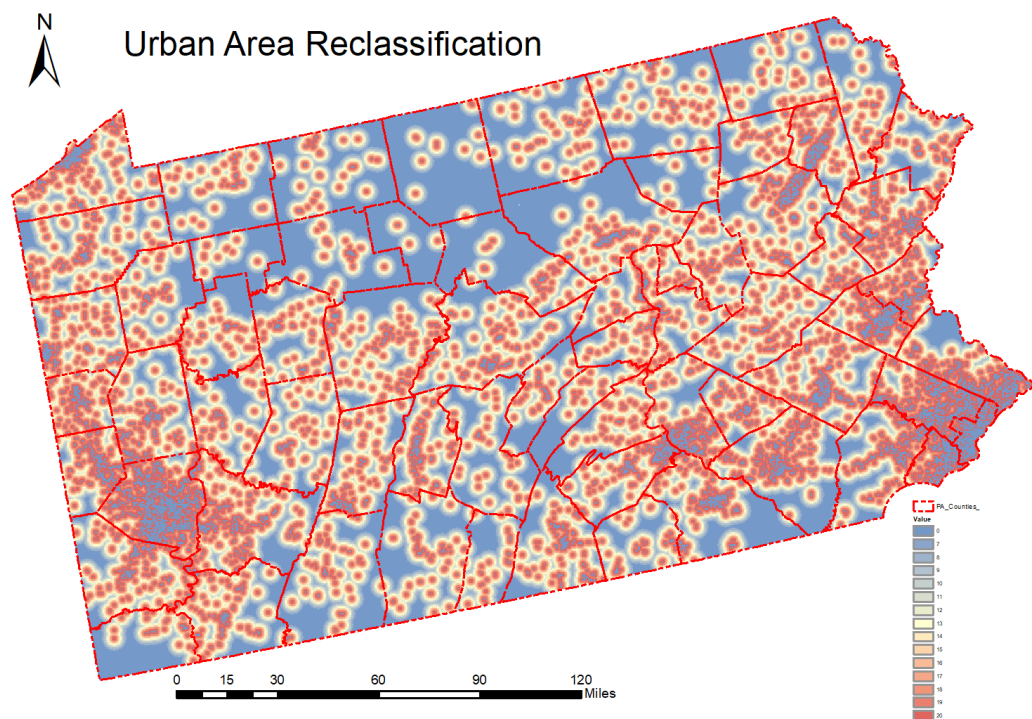
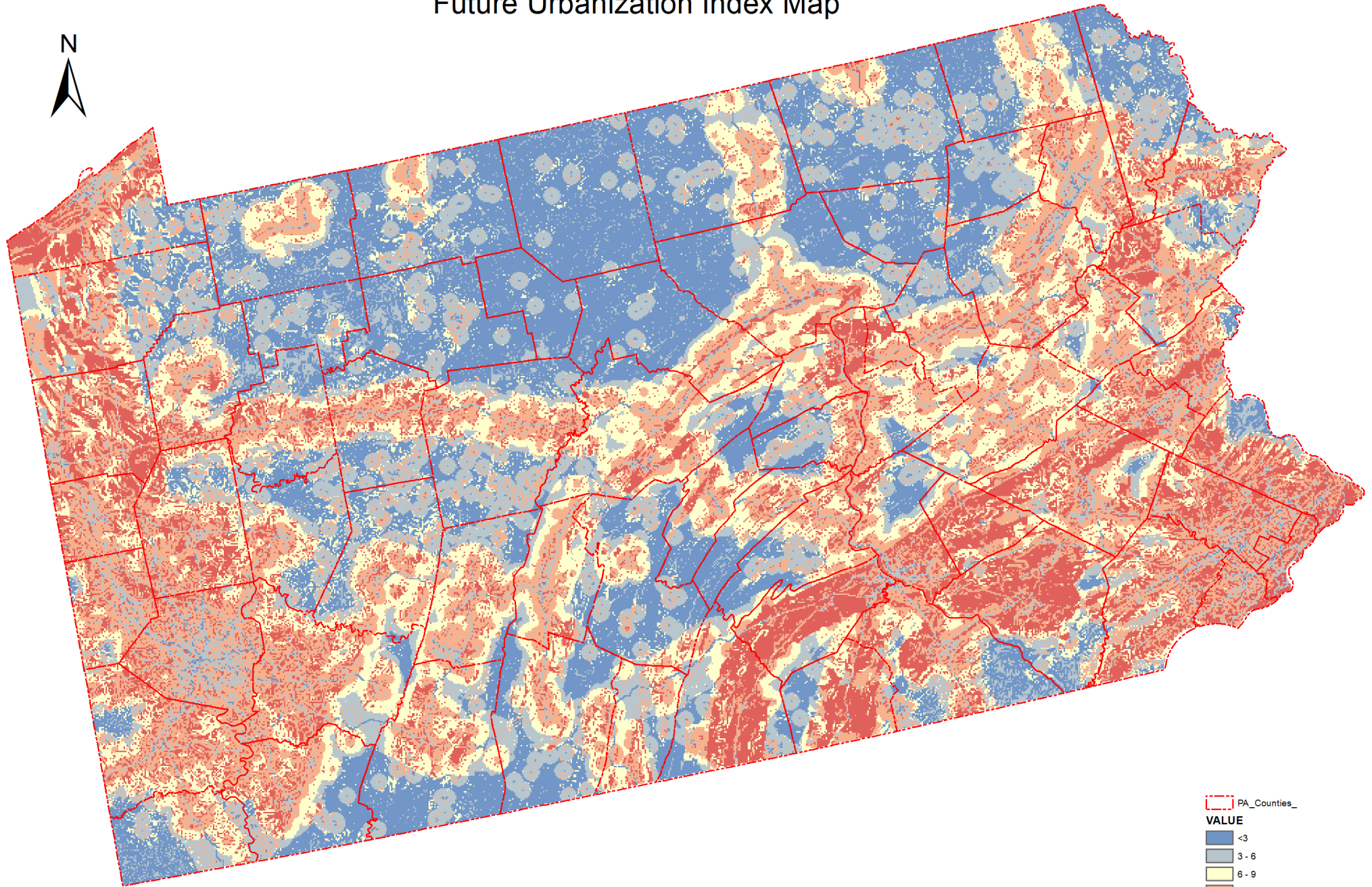


Table of Urbanized Lands

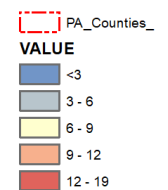
NAME	Urbanized Sensitive Area (Acres)	Grid cells
Erie	22999754.42	92
Bradford	14249847.85	57
Tioga	11499877.21	46
Potter	2999967.968	12
McKean	8499909.244	34
Warren	10999882.55	44
Wayne	12749863.87	51
Susquehanna	9249901.236	37
Crawford	22499759.76	90
Wyoming	5749938.606	23
Lackawanna	15749831.83	63
Elk	5749938.606	23
Forest	1999978.646	8
Venango	15499834.5	62
Cameron	749991.9921	3
Pike	15499834.5	62
Lycoming	14499845.18	58
Sullivan	2249975.976	9
Mercer	23499749.09	94
Clinton	8999903.905	36
Clarion	11499877.21	46
Luzerne	24249741.08	97
Jefferson	15499834.5	62
Columbia	11499877.21	46
Clearfield	30749671.68	123
Centre	24749735.74	99
Monroe	35499620.96	142
Northumberland	10249890.56	41
Butler	31249666.34	125
Montour	4499951.953	18
Armstrong	13999850.52	56
Union	6749927.929	27
Carbon	15249837.17	61
Lawrence	25249730.4	101
Northampton	16249826.5	65
Schuylkill	22499759.76	90
Indiana	12749863.87	51
Snyder	8749906.574	35
Beaver	29499685.02	118
Mifflin	8249911.913	33
Lehigh	18749799.8	75
Huntingdon	9249901.236	37
Blair	20249783.79	81
Cambria	21749767.77	87
Juniata	3749959.96	15
Westmoreland	43249538.21	173
Berks	28249698.37	113
Allegheny	71499236.58	286
Dauphin	23749746.42	95
Perry	12499866.53	50
Bucks	23249751.75	93
Lebanon	14749842.51	59
Washington	33499642.31	134
Montgomery	32749650.32	131
Cumberland	17999807.81	72
Bedford	12999861.2	52
Lancaster	37249602.27	149
Franklin	17749810.48	71
Somerset	16749821.16	67
Chester	23249751.75	93
York	22749757.09	91
Fulton	6999925.26	28
Fayette	21999765.1	88
Philadelphia	10249890.56	41
Adams	7999914.582	32
Delaware	20249783.79	81
Greene	8749906.574	35



Future Urbanization Index Map



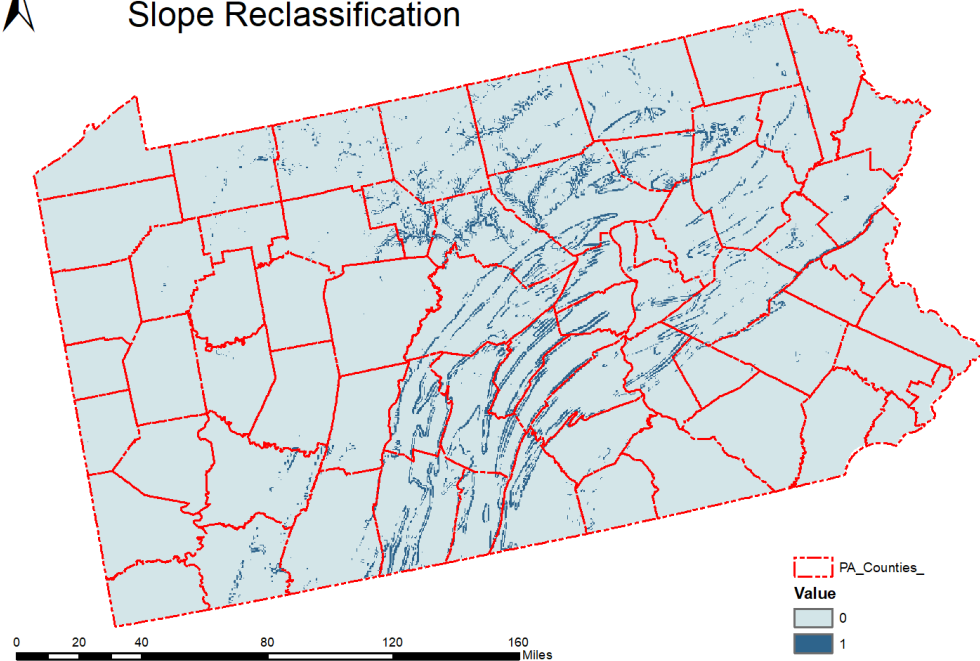
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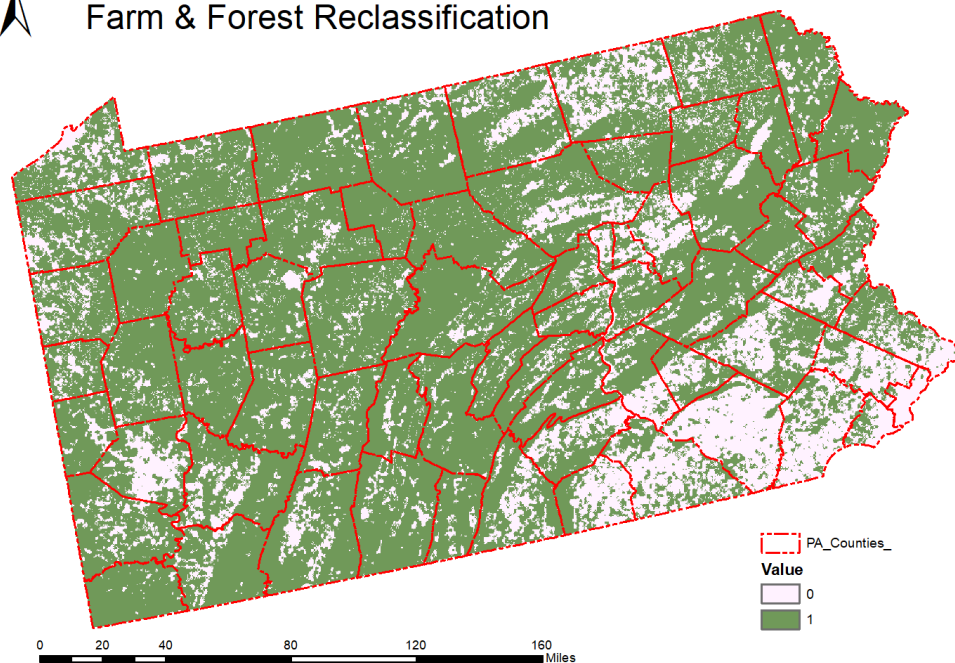
Request 5



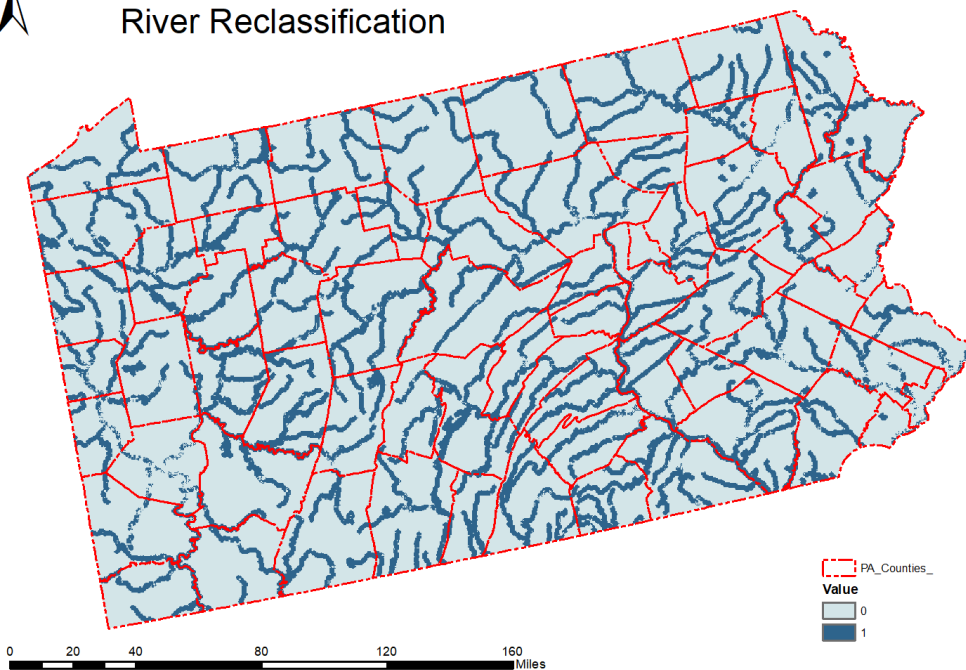
Slope Reclassification



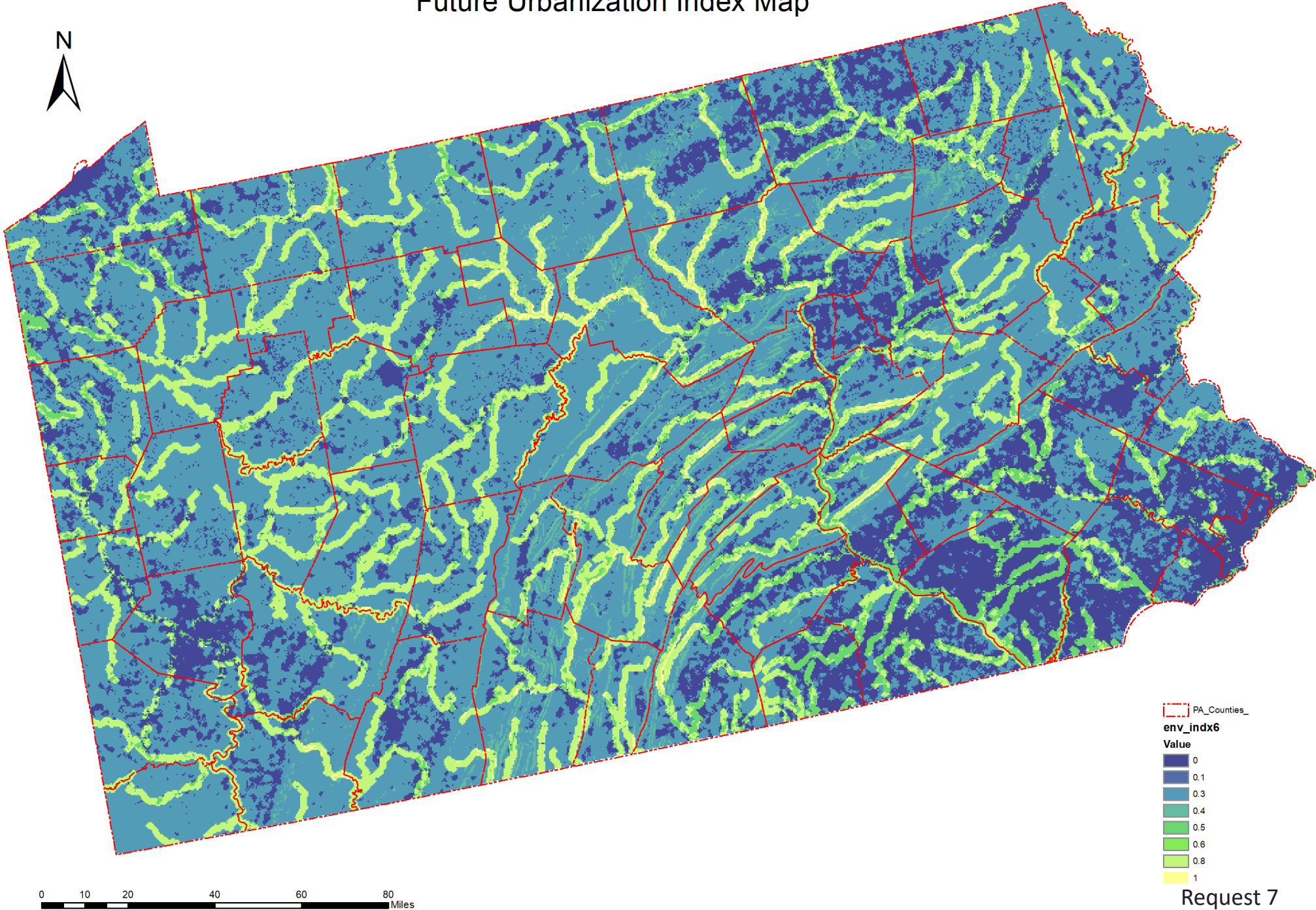
Farm & Forest Reclassification



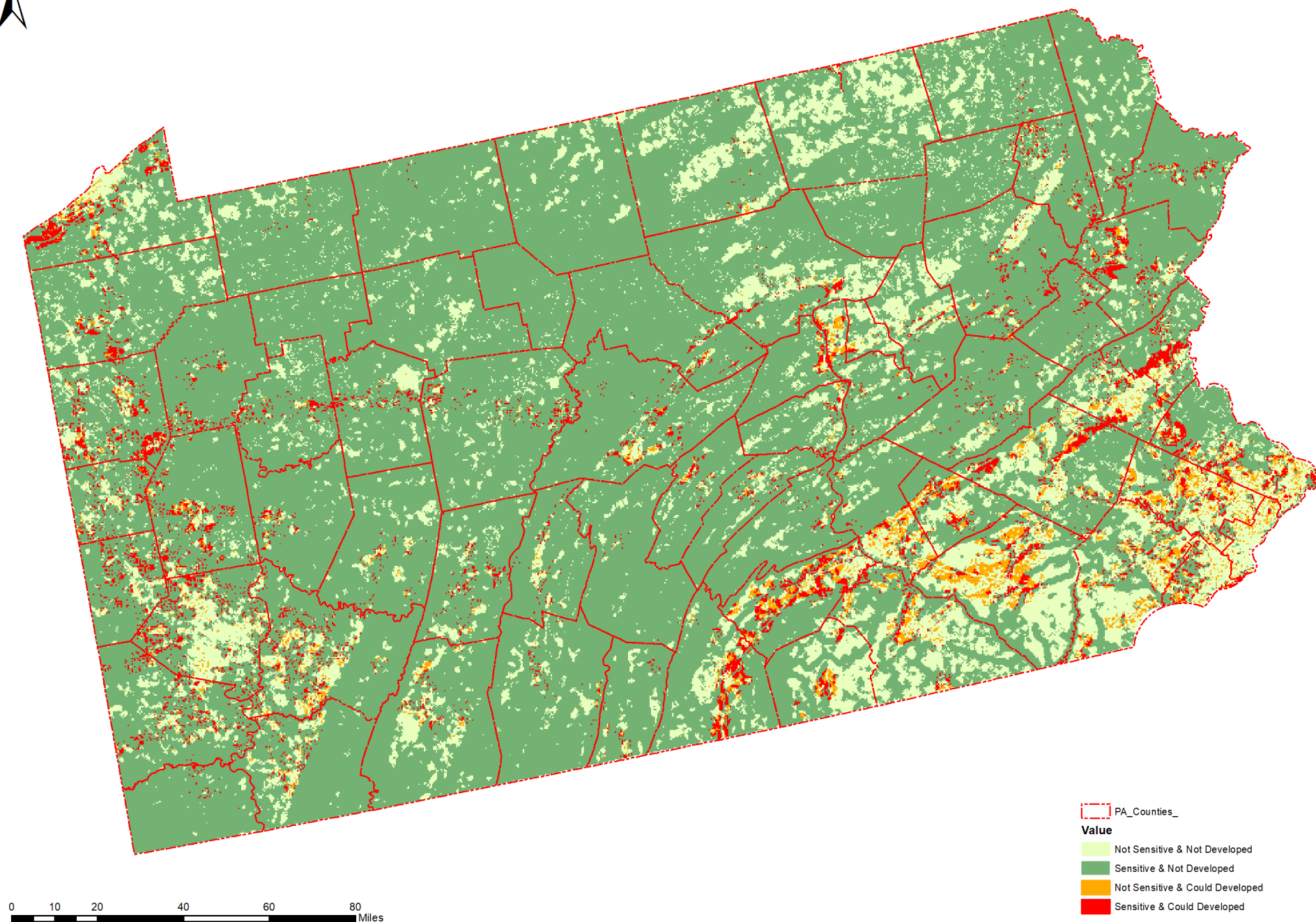
River Reclassification



Future Urbanization Index Map

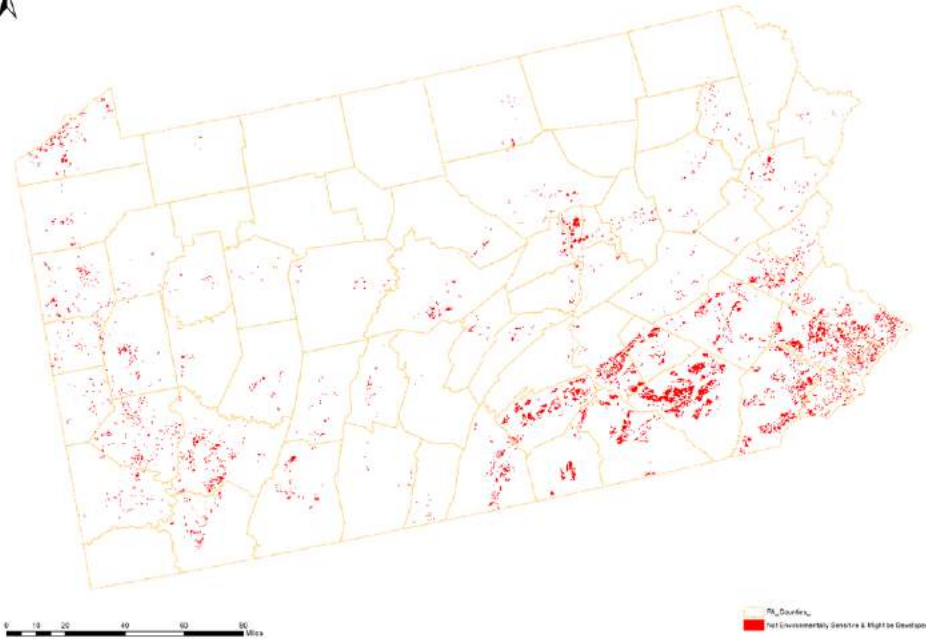


New Future Urbanization Map





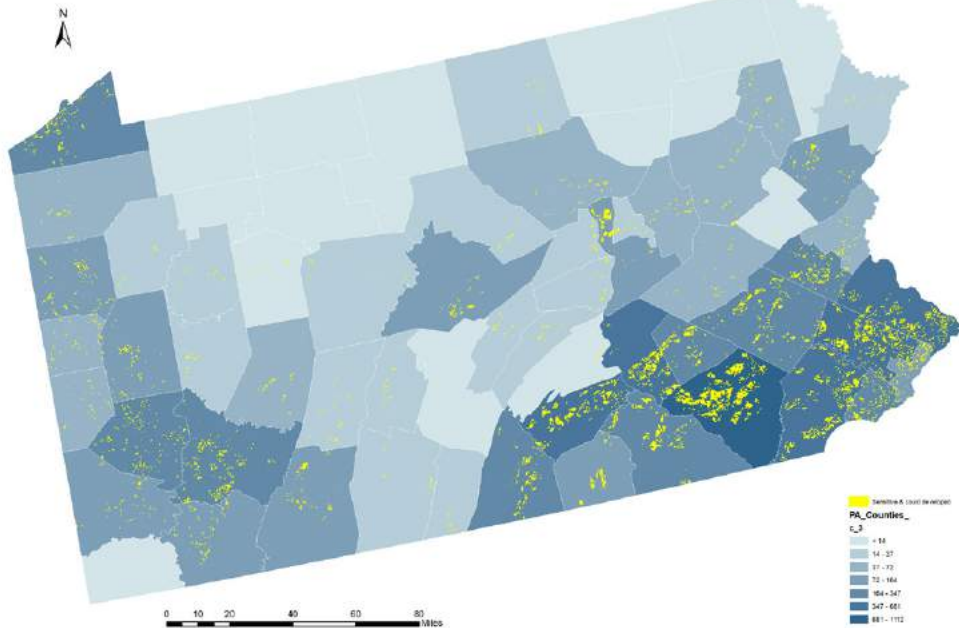
Not Environmental Sensitive & might be developed Areas



Based on the future development map, areas that are most suitable for urbanization are located in Lancaster, Montgomery, Chester, Cumberland and Bucks.

Geographically, the most suitable counties for development in the future are located in the southeastern part of Pennsylvania State.

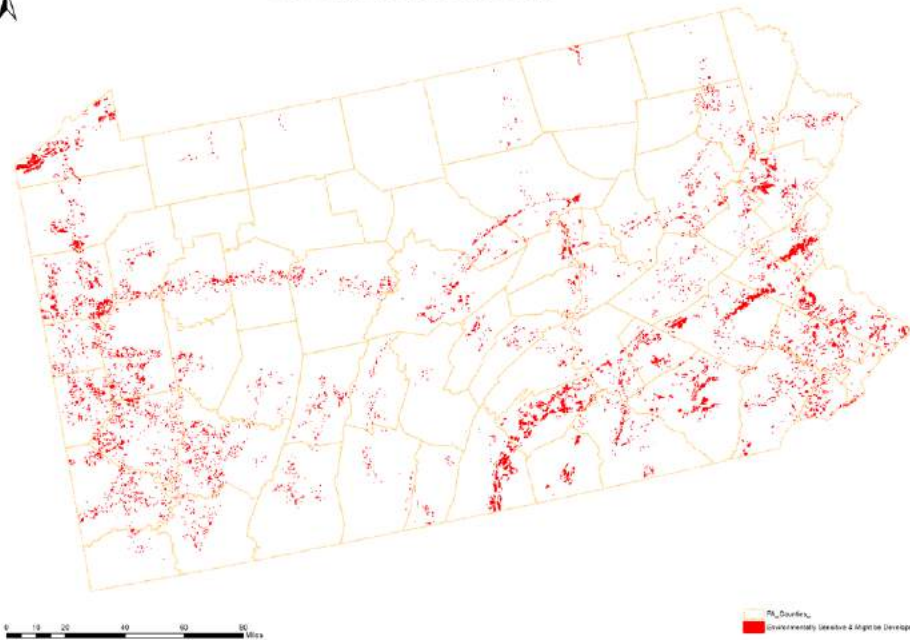
Not Environmental Sensitive & might be developed Areas



NAME	COUNT
Lancaster	1112
Montgomery	681
Chester	608
Cumberland	471
Bucks	436
Dauphin	391
York	347
Berks	331
Westmoreland	297
Lehigh	214
Allegheny	211
Lebanon	199
Erie	197
Franklin	196
Delaware	190
Philadelphia	164
Northumberland	163
Mercer	148
Adams	121



Environmental Sensitive & might be developed Areas



Compare these two factors and we could tell that urban development is still tend to happen in counties around Philly.

Then come to counties near Great Lake and next to New Jersey.

To be more specific, namely, from perspective of Philly alone. Opportunities lie in north Philly.

Environmental Sensitive & might be developed Areas



NAME	Grid cells
Cumberland	728
Mercer	654
Bucks	634
Allegheny	626
Erie	618
Berks	530
Westmoreland	516
Butler	503
Lancaster	471
Franklin	452
Washington	450
Montgomery	433
Monroe	429
Northampton	420
Chester	335
Beaver	329
Luzerne	266
York	255
Crawford	243