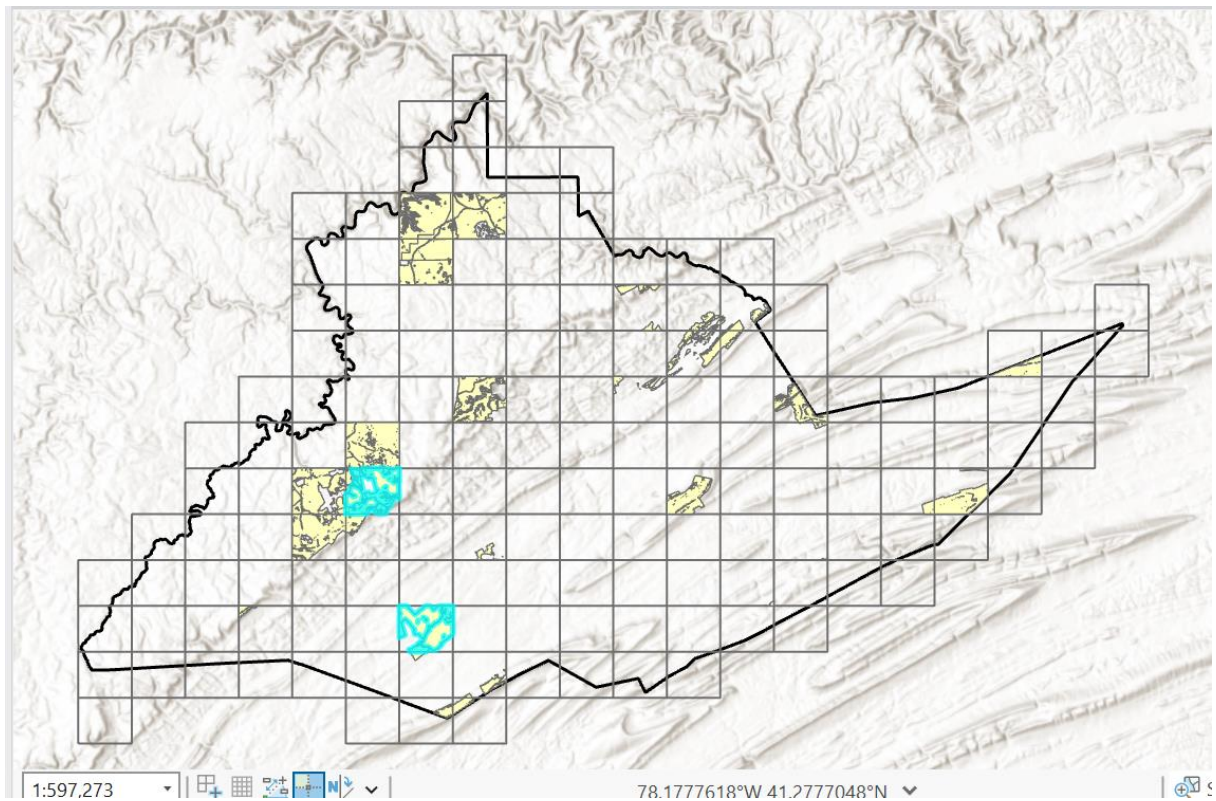


Final locations

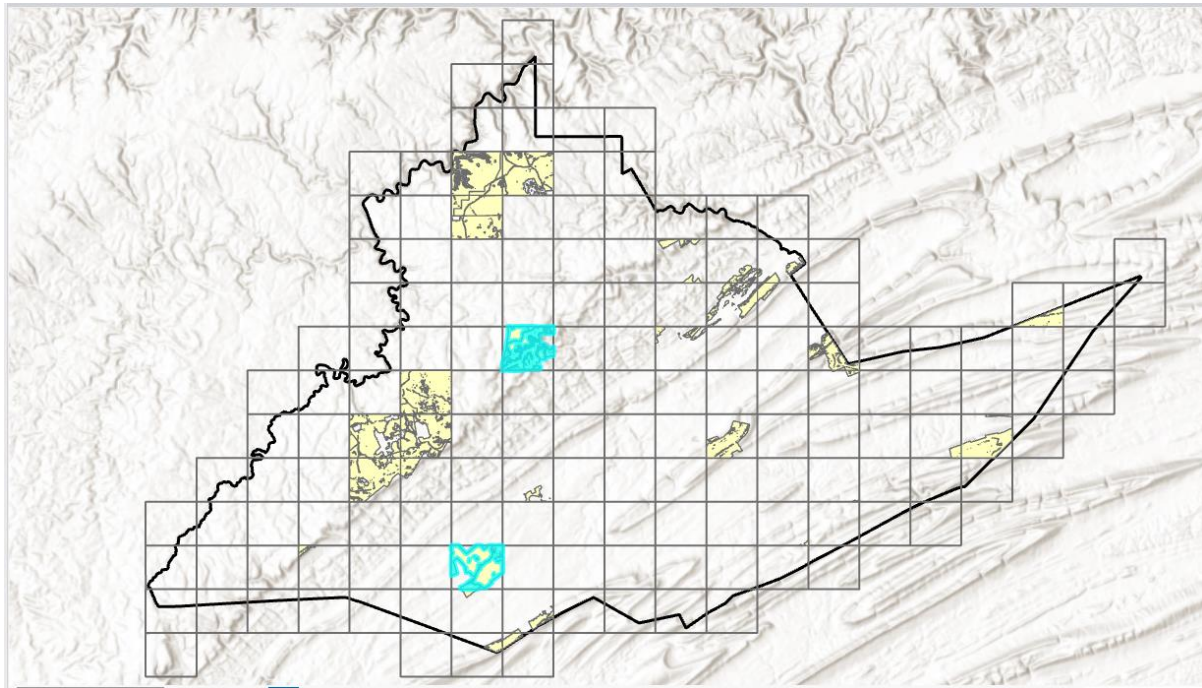
Among all six criteria, for all locations, a couple of criteria are the same such as, all are forested areas, high potential habitat zones, public land, and slopes are less than 15%. The criteria that made them separate from each other were the variety of species, road coverage, and the area of that land.

Species: If we prioritize the number of species, these are the suitable locations, and the number of species varies from 114 to 97.



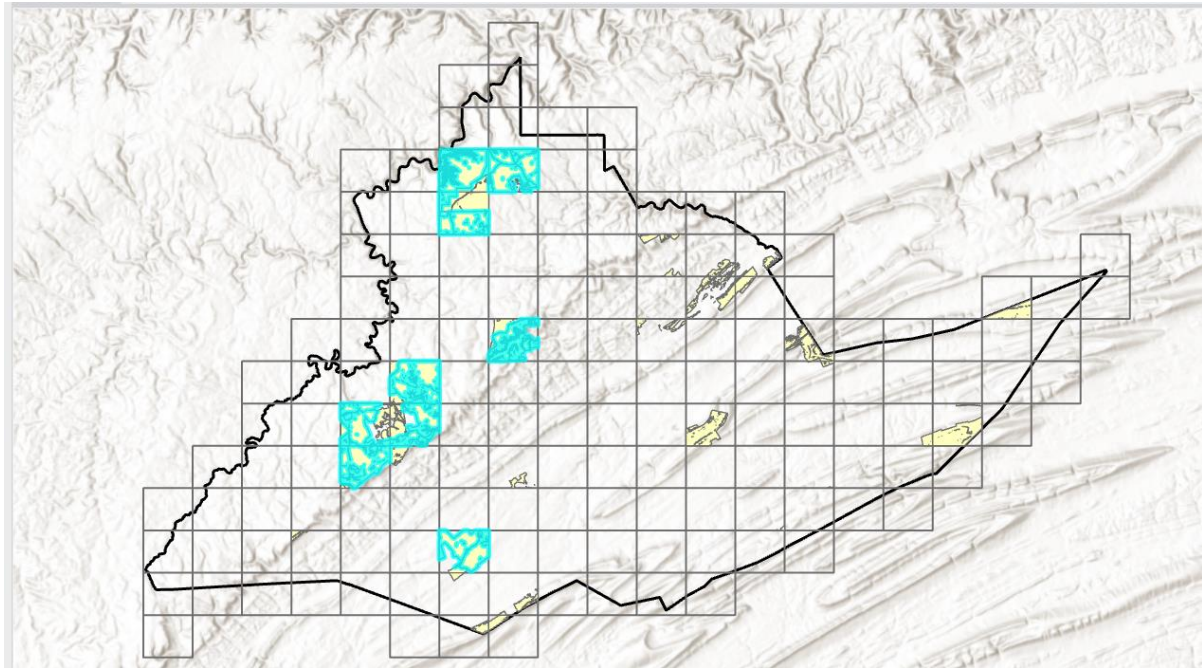
LandSuitability								
Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy								
	OBJECTID *	BLOCK_IDs	Combined	Road_occupancy	HABITATPOT	OWNERSHIP	Shape_Area	LandArea_sqm
1	545	40077782	114	7.699176	HIGH	Public	38308.795652	3559.017811
2	548	40077782	114	7.699176	HIGH	Public	6632.934953	616.222286
3	549	40077782	114	7.699176	HIGH	Public	13227.724681	1228.900751
4	550	40077782	114	7.699176	HIGH	Public	6632.934953	616.222286
5	551	40077782	114	7.699176	HIGH	Public	31811.989267	2955.442333
6	566	40077782	114	7.699176	HIGH	Public	12404451.71499	1152415.883515
7	590	40077684	110	7.324192	HIGH	Public	18176920.439431	1688697.921446
8	582	40077681	99	4.348843	HIGH	Public	7636867.748265	709491.067853
9	383	40078816	98	6.927064	HIGH	Public	19374.961256	1800.000001
10	384	40078816	98	6.927064	HIGH	Public	639807.478311	59440.297511
11	385	40078816	98	6.927064	HIGH	Public	1276026.703425	118547.234058
12	389	40078816	98	6.927064	HIGH	Public	6632.833759	616.212885
13	390	40078816	98	6.927064	HIGH	Public	6632.934957	616.222286
14	392	40078816	98	6.927064	HIGH	Public	173598.226436	16127.867486

Road Occupancy: If we prioritize road occupancy, the less the coverage of the roads, the better it represents the land. The following locations have less occupancy of the road which varies from 2 to 3 percent of the study sites.



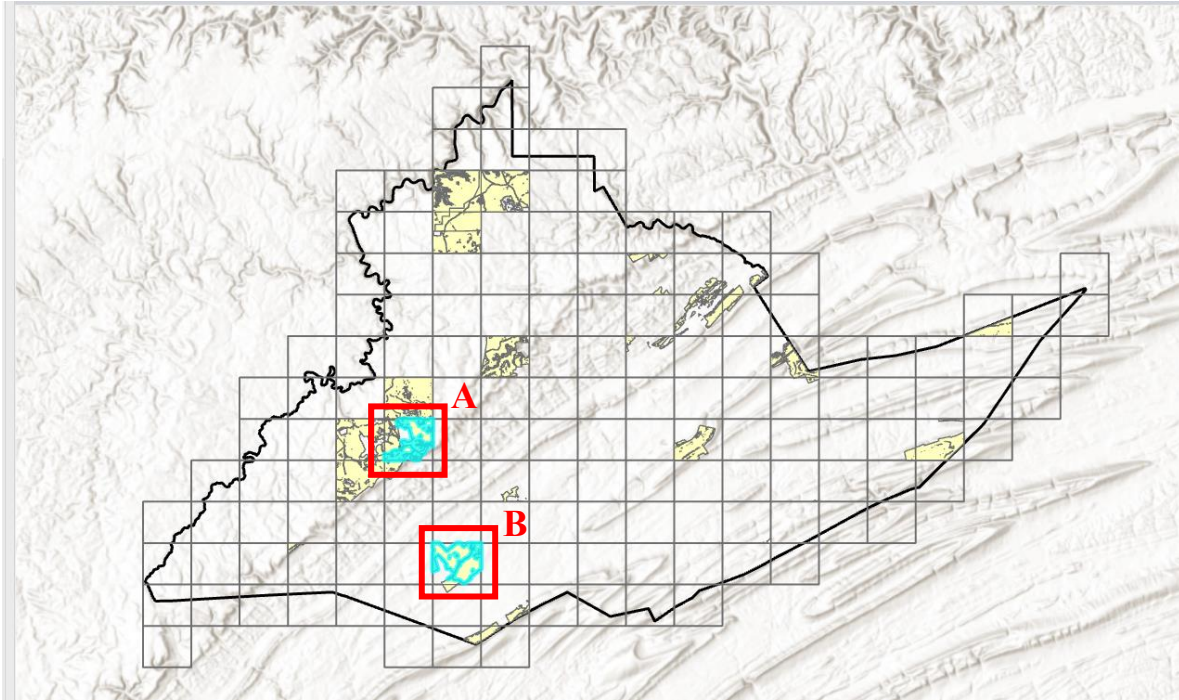
LandSuitability								
Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy								
	OBJECTID *	BLOCK_IDs	Combined	Road_occupancy ▲	HABITATPOT	OWNERSHIP	Shape_Area	LandArea_sqm
1	568	40077785	97	2.262045	HIGH	Public	6632.934956	616.222286
2	569	40077785	97	2.262045	HIGH	Public	6632.934952	616.222286
3	570	40077785	97	2.262045	HIGH	Public	13227.724684	1228.900751
4	571	40077785	97	2.262045	HIGH	Public	6632.934952	616.222286
5	572	40077785	97	2.262045	HIGH	Public	13227.72468	1228.900751
6	573	40077785	97	2.262045	HIGH	Public	6632.934956	616.222286
7	574	40077785	97	2.262045	HIGH	Public	6632.934954	616.222286
8	575	40077785	97	2.262045	HIGH	Public	13076.163496	1214.8202
9	576	40077785	97	2.262045	HIGH	Public	9687.480621	900
10	577	40077785	97	2.262045	HIGH	Public	38749.922504	3600
11	578	40077785	97	2.262045	HIGH	Public	167288255.851126	15541649.691392
12	583	40077785	97	2.262045	HIGH	Public	10205523.239684	948127.926265
13	43	40077882	76	2.928152	HIGH	Public	5415.78465	503.144871
14	44	40077882	76	2.928152	HIGH	Public	158196.36175	14696.981711
15	46	40077882	76	2.928152	HIGH	Public	5415.784649	503.14487
16	47	40077882	76	2.928152	HIGH	Public	10676.674205	991.899458
17	49	40077882	76	2.928152	HIGH	Public	58296.368906	5415.931556
18	50	40077882	76	2.928152	HIGH	Public	339995.99526	31586.787894

Suitable Land's Size: If we prioritize the size of the land, suitable locations are as follows



LandSuitability X								
Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy								
	OBJECTID *	BLOCK_IDs	Combined	Road_occupancy	HABITATPOT	OWNERSHIP	Shape_Area	LandArea_sqm ▼
1	348	41077286	71	7.438149	HIGH	Public	215809493.543925	20049438.208746
2	386	40078814	72	3.848345	HIGH	Public	212941185.604476	19782962.61564
3	552	40078711	76	5.427098	HIGH	Public	176699726.274581	16416007.402035
4	347	41077285	71	3.257874	HIGH	Public	171050527.970298	15891177.606684
5	578	40077785	97	2.262045	HIGH	Public	167288255.851126	15541649.691392
6	345	41077181	76	4.440445	HIGH	Public	148720777.101394	13816667.570488
7	554	40078815	73	5.570453	HIGH	Public	146771110.065183	13635536.851324
8	557	40078816	98	6.927064	HIGH	Public	137276580.58937	12753462.671359
9	564	40077882	76	2.928152	HIGH	Public	131533632.744465	12219923.223846
10	587	40077835	89	6.70614	HIGH	Public	107149219.780715	9954528.069329
11	539	40077866	85	5.772974	HIGH	Public	99072437.936411	9204167.481137
12	344	41077181	76	4.440445	HIGH	Public	97372540.236625	9046241.185443
13	541	40077852	74	4.084294	HIGH	Public	78199957.711533	7265042.859415
14	542	41077136	74	5.613039	HIGH	Public	59296508.088277	5508847.898155
15	346	41077285	71	3.257874	HIGH	Public	42037051.147659	3905385.465797
16	388	40077882	76	2.928152	HIGH	Public	34601898.688608	3214634.436468
17	553	40078712	73	6.066305	HIGH	Public	30205238.585356	2806169.713173
18	559	40078816	98	6.927064	HIGH	Public	27556019.512759	2560048.223218

Preferred location: Different locations emerge during each prioritization. If I must choose one location based on all the criteria, I would select **location B** from the map. However, considering the overall scenario, the future potential of the area, and the fact that species or habitats cannot be confined to a single location, **location A** is the better choice, as it is surrounded by more potential areas. So, there will be an opportunity to expand the project. But in this case, only the road coverage of the study site will be compromised compared to location B.



The details of both locations are given below:

LandSuitability X								
Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy								
	OBJECTID *	BLOCK_IDS	Combined	Road_occupancy	HABITATPOT	OWNERSHIP	Shape_Area	LandArea_sqm ▼
1	348	41077286	71	7.438149	HIGH	Public	215809493.543925	20049438.208746
2	386	40078814	72	3.848345	HIGH	Public	212941185.604476	19782962.61564
3	552	40078711	76	5.427098	HIGH	Public	176699726.274581	16416007.402035
4	347	41077285	71	3.257874	HIGH	Public	171050527.970298	15891177.606684
B	578	40077785	97	2.262045	HIGH	Public	167288255.851126	15541649.691392
6	345	41077181	76	4.440445	HIGH	Public	148720777.101394	13816667.570488
7	554	40078815	73	5.570453	HIGH	Public	146771110.065183	13635536.851324
A	557	40078816	98	6.927064	HIGH	Public	137276580.58937	12753462.671359
9	564	40077882	76	2.928152	HIGH	Public	131533632.744465	12219923.223846
10	587	40077835	89	6.70614	HIGH	Public	107149219.780715	9954528.069329
11	539	40077866	85	5.772974	HIGH	Public	99072437.936411	9204167.481137
12	344	41077181	76	4.440445	HIGH	Public	97372540.236625	9046241.185443
13	541	40077852	74	4.084294	HIGH	Public	78199957.711533	7265042.859415
14	542	41077136	74	5.613039	HIGH	Public	59296508.088277	5508847.898155
15	346	41077285	71	3.257874	HIGH	Public	42037051.147659	3905385.465797
16	388	40077882	76	2.928152	HIGH	Public	34601898.688608	3214634.436468
17	553	40078712	73	6.066305	HIGH	Public	30205238.585356	2806169.713173
18	559	40078816	98	6.927064	HIGH	Public	27556019.512759	2560048.223218