Development of a VHF Repeater System with Coverage of Shawnee, Jefferson, Douglas and Leavenworth Counties

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GIS Day

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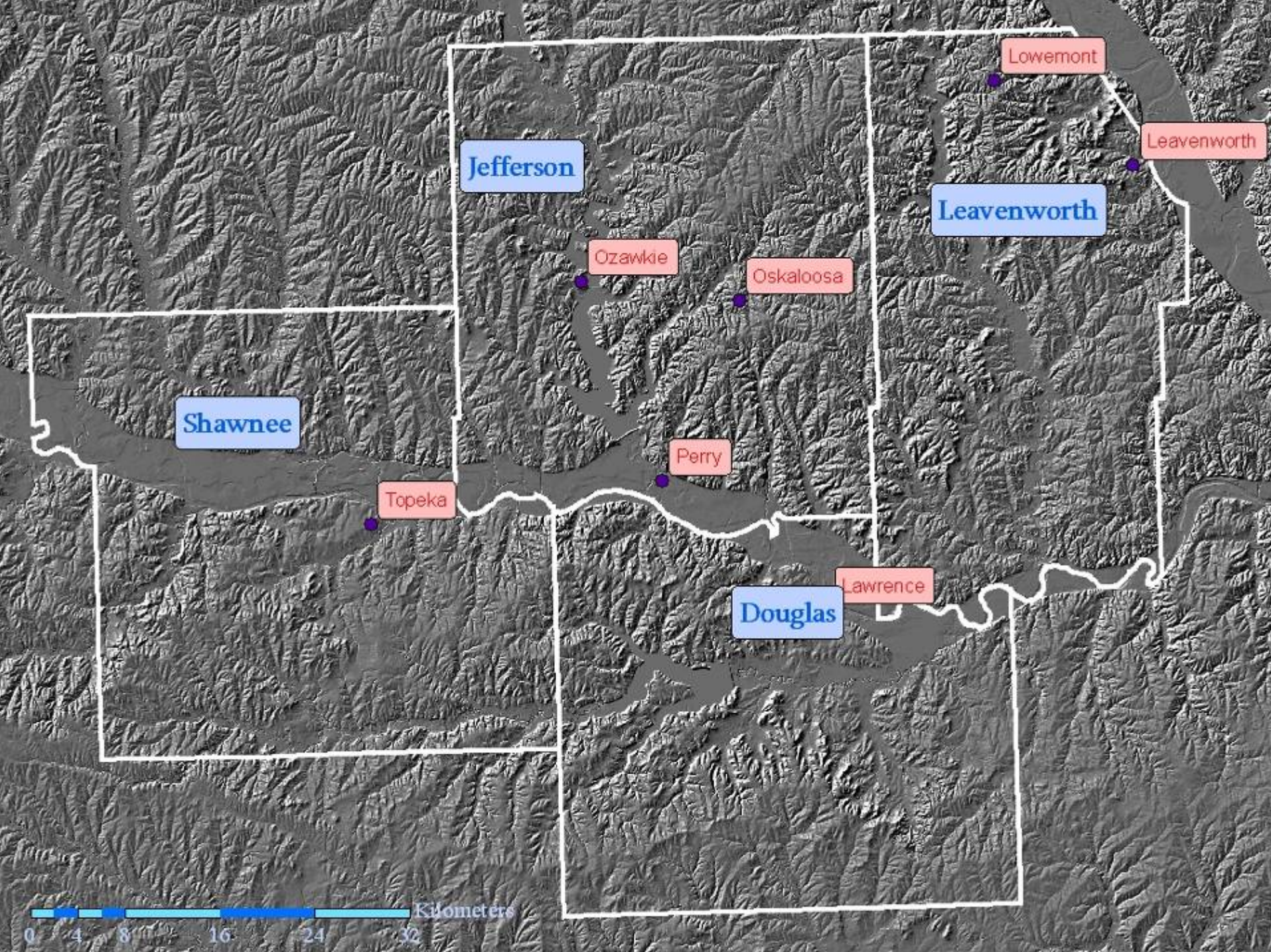
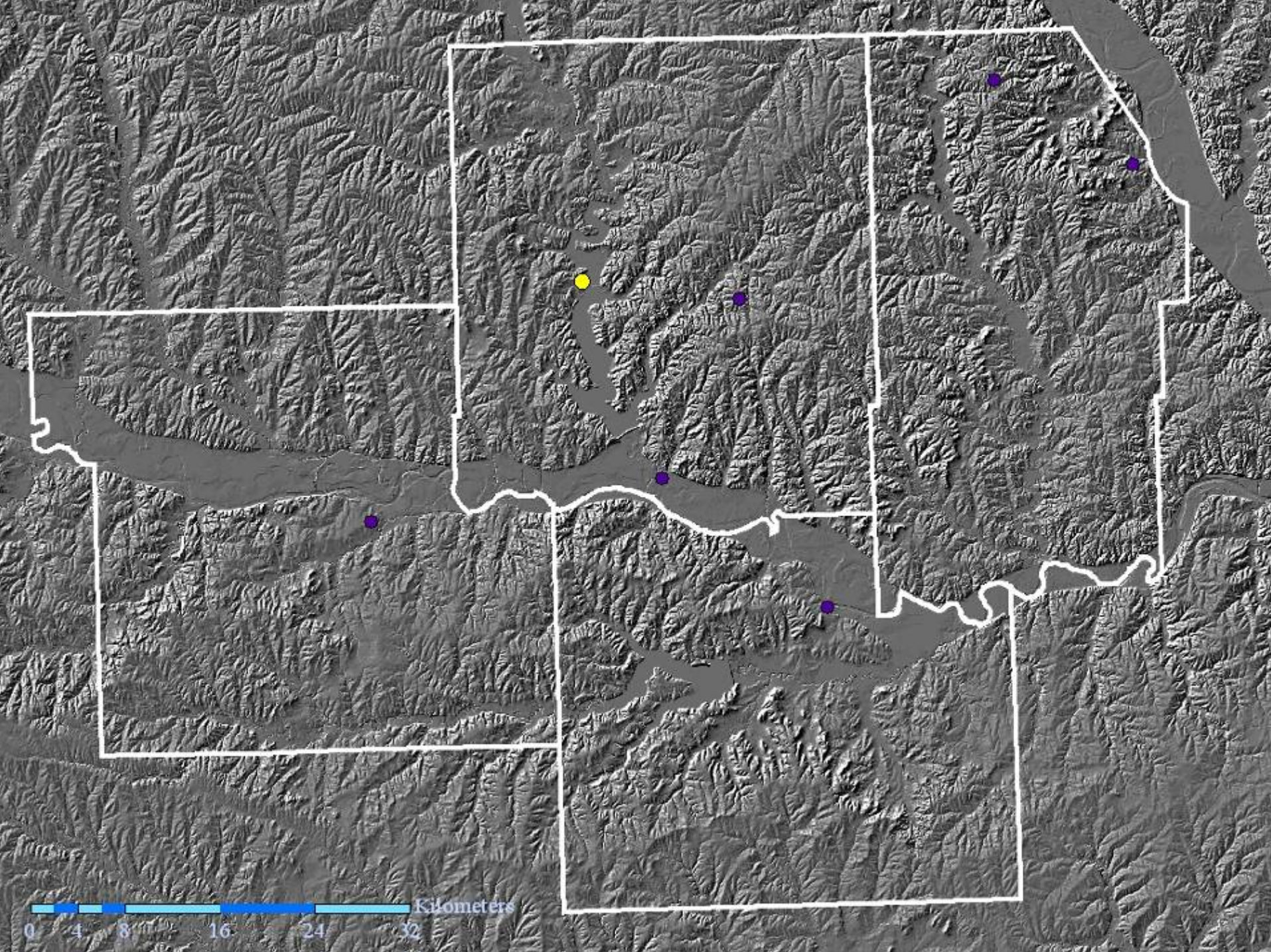
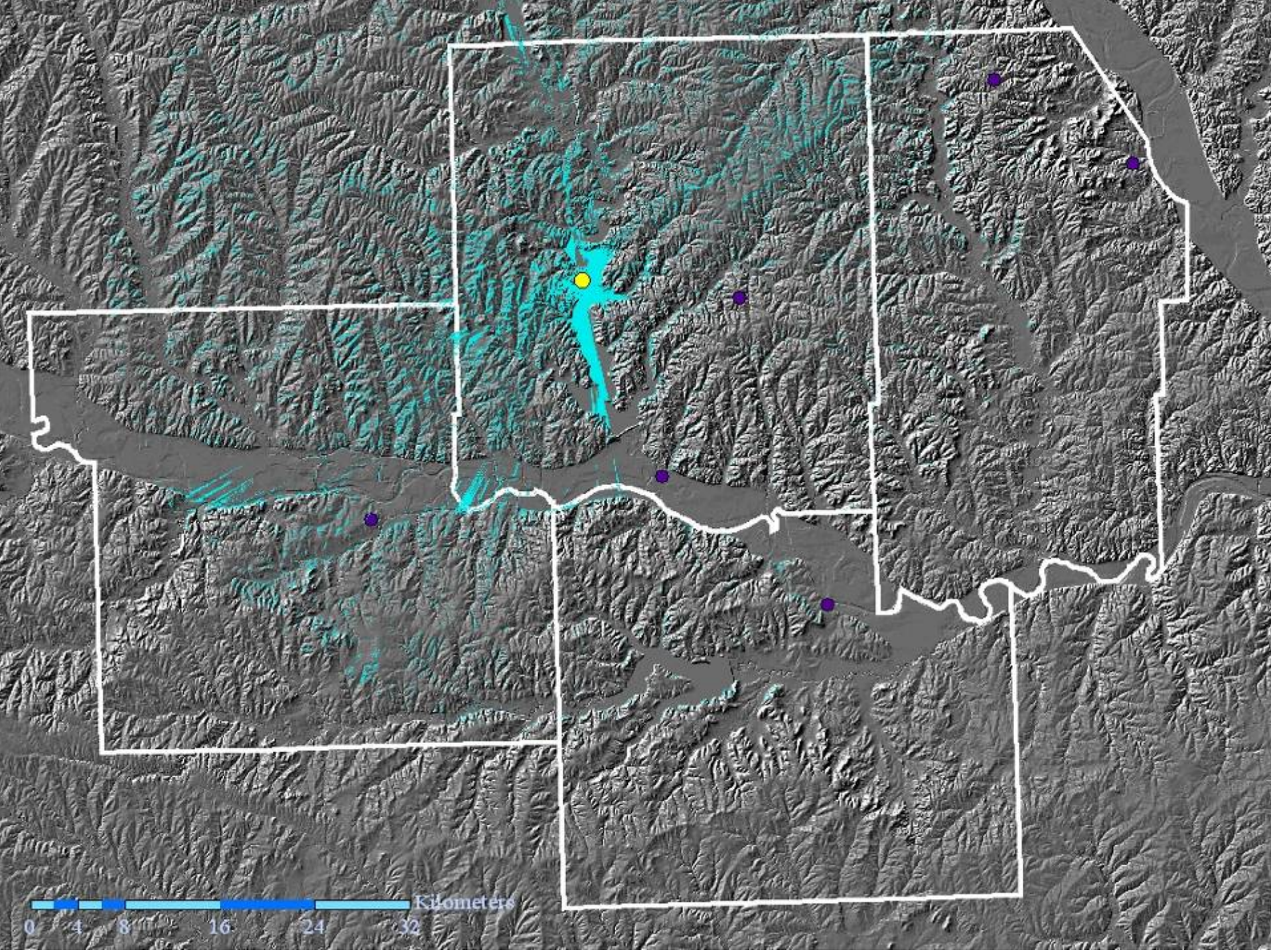
University of Kansas

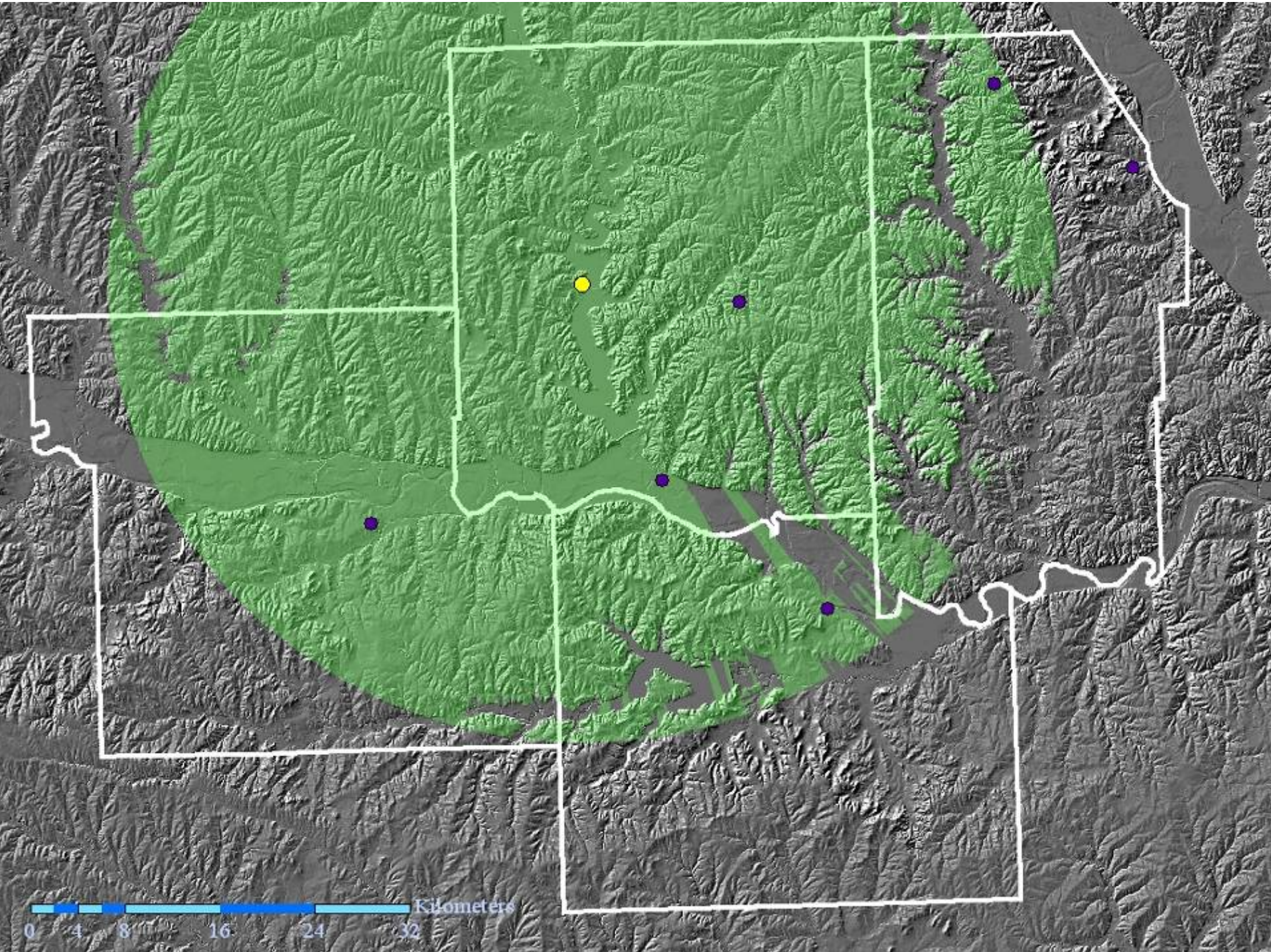
Target Coverage

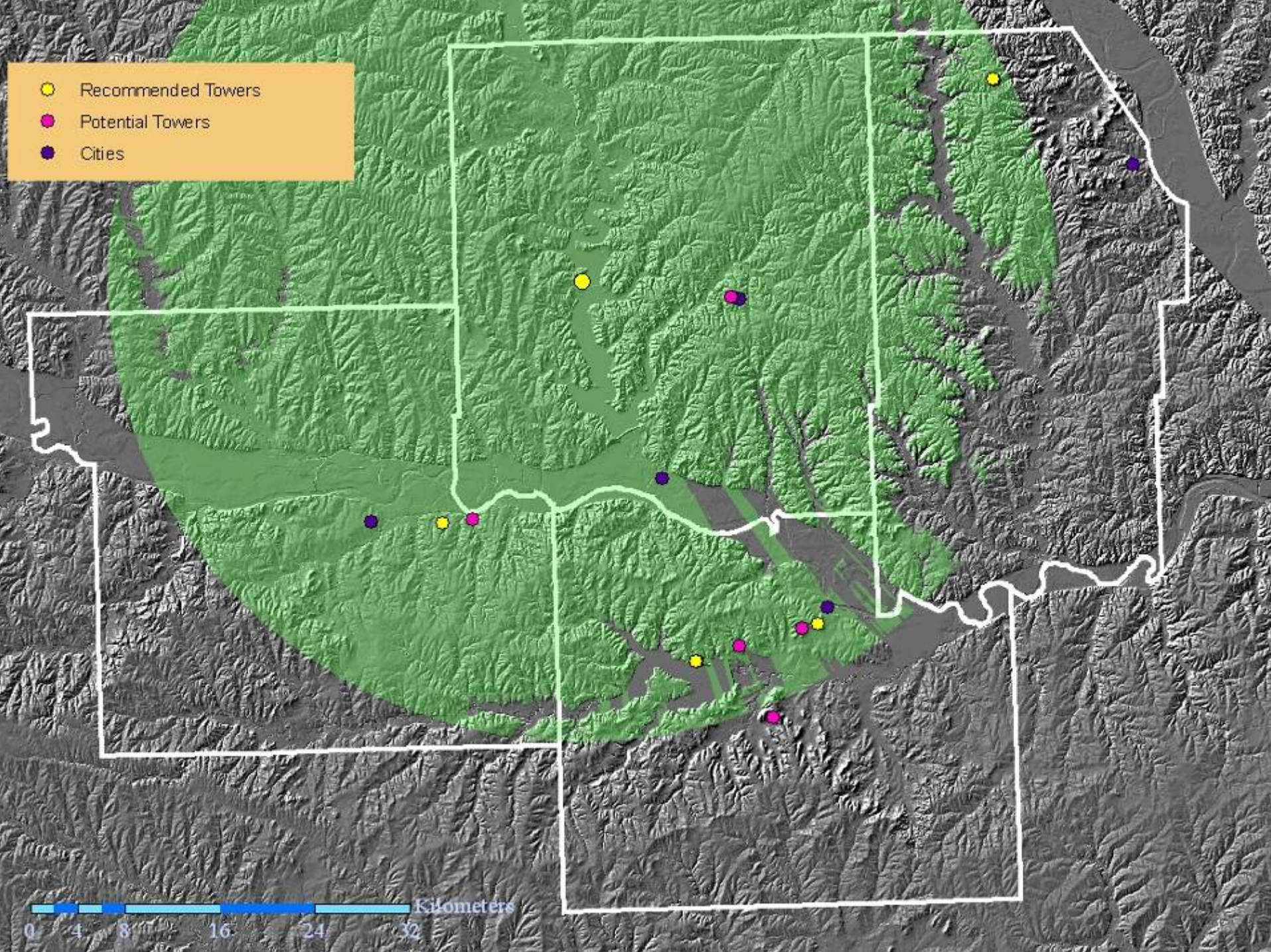
- Jefferson County
  - Perry Lake
- Shawnee County
  - Topeka
- Douglas County
  - Lawrence
  - Clinton Lake
- Leavenworth County

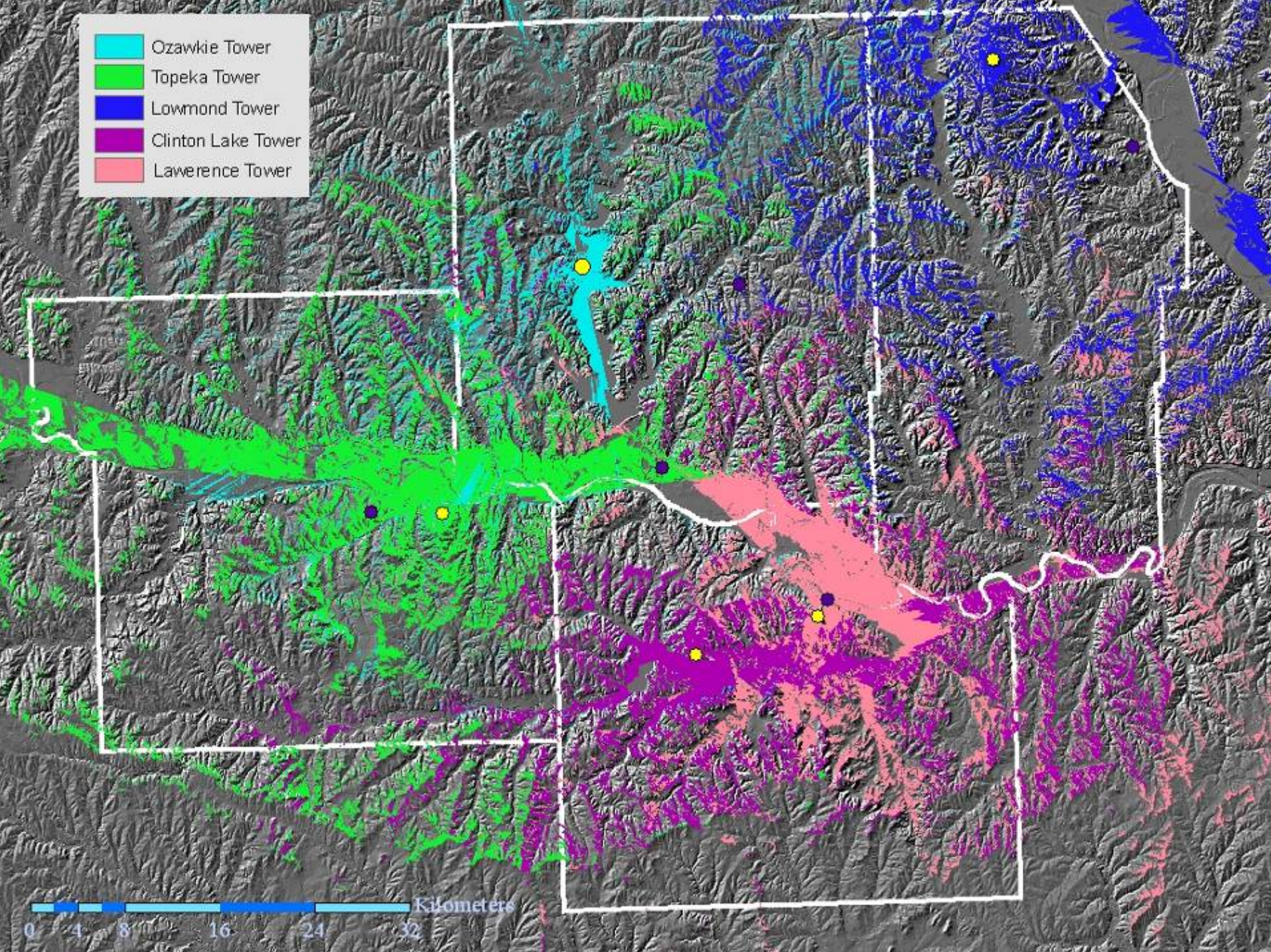

Lowemont
Leavenworth
Jefferson
Leavenworth
Ozawkie
Oskaloosa
Shawnee
Perry
Topeka
Lawrence
Douglas
Kilometers
0
4
8
16
24
32

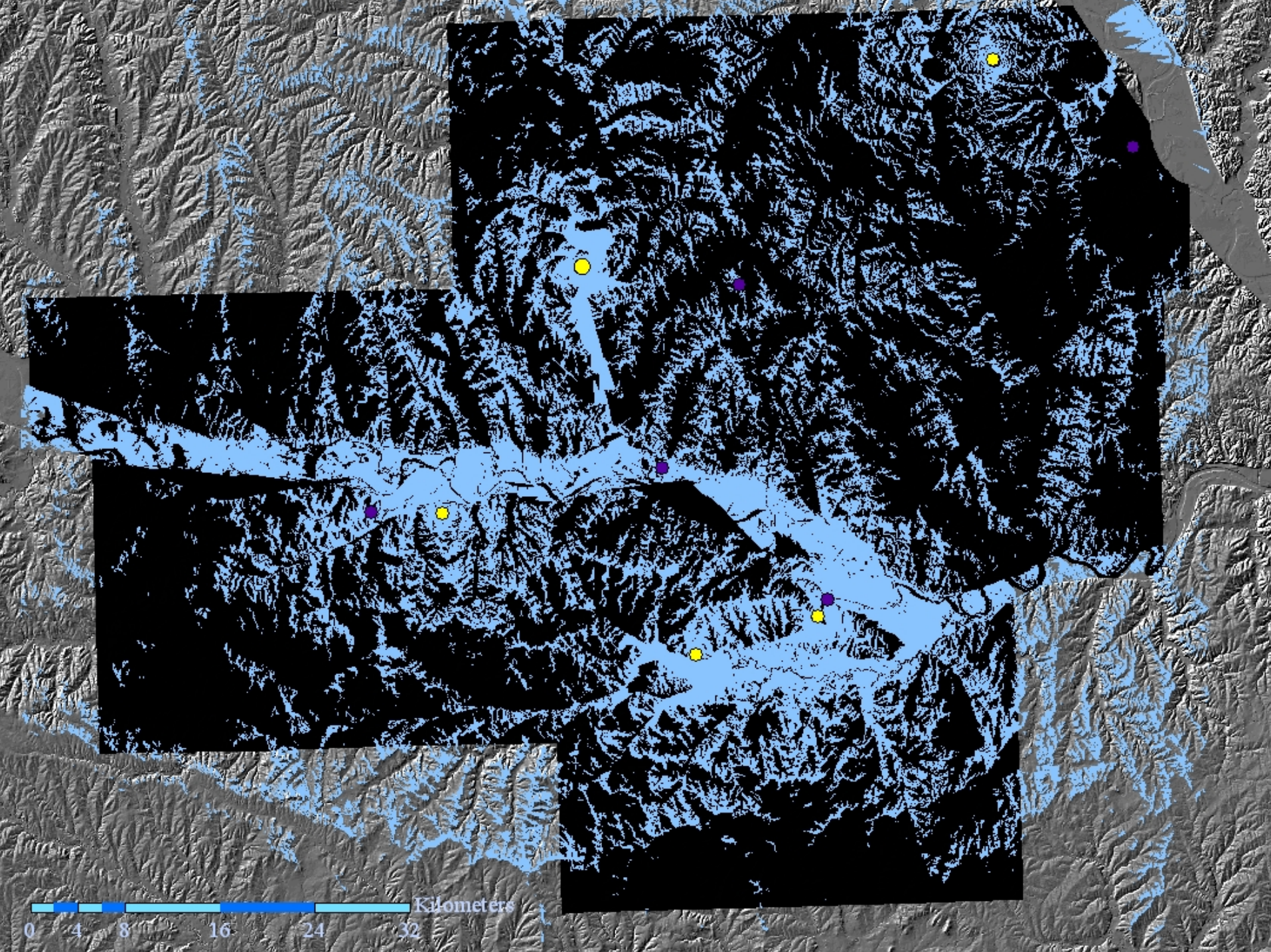

Kilometers
0 4 8 16 24 32

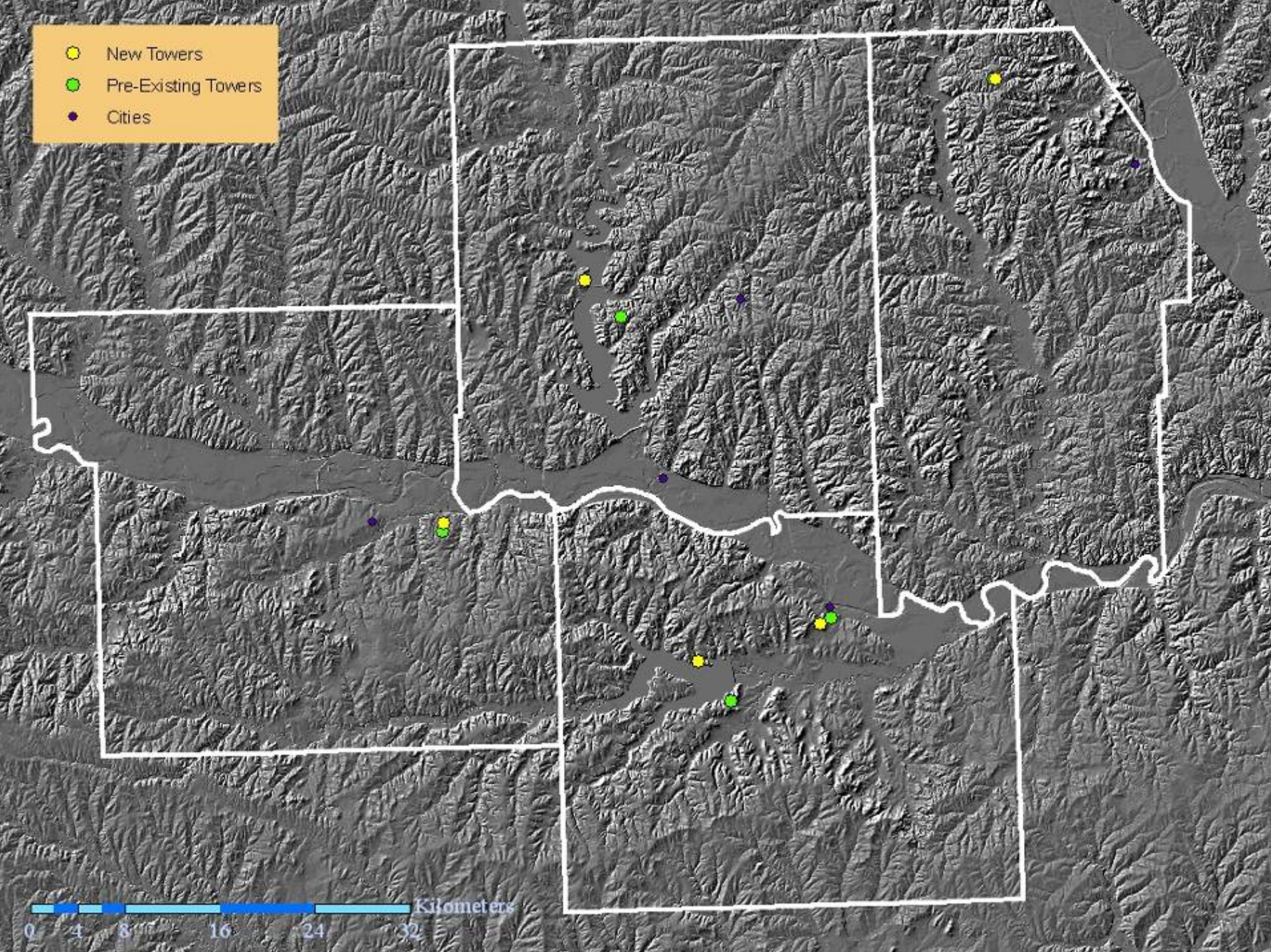

Kilometers
0 4 8 16 24 32

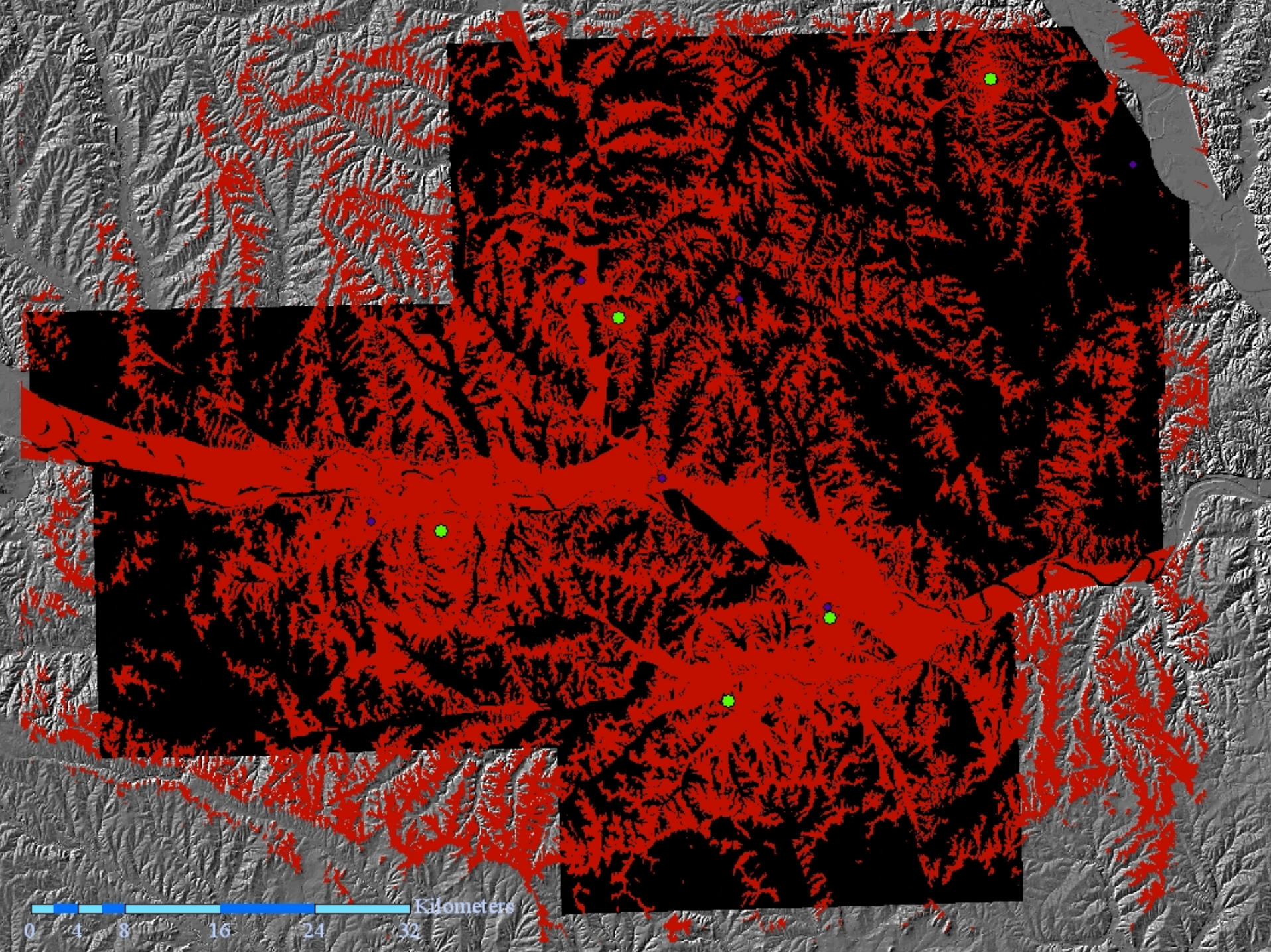

Kilometers
0 4 8 16 24 32


Recommended Towers
Potential Towers
Cities
Kilometers
0
4
8
16
24
32


Ozawkie Tower
Topeka Tower
Lowmond Tower
Clinton Lake Tower
Lawerence Tower
Kilometers
0
4
8
16
24
32


Kilometers
0 4 8 16 24 32


New Towers
Pre-Existing Towers
Cities
Kilometers
0
4
8
16
24
32


Kilometers
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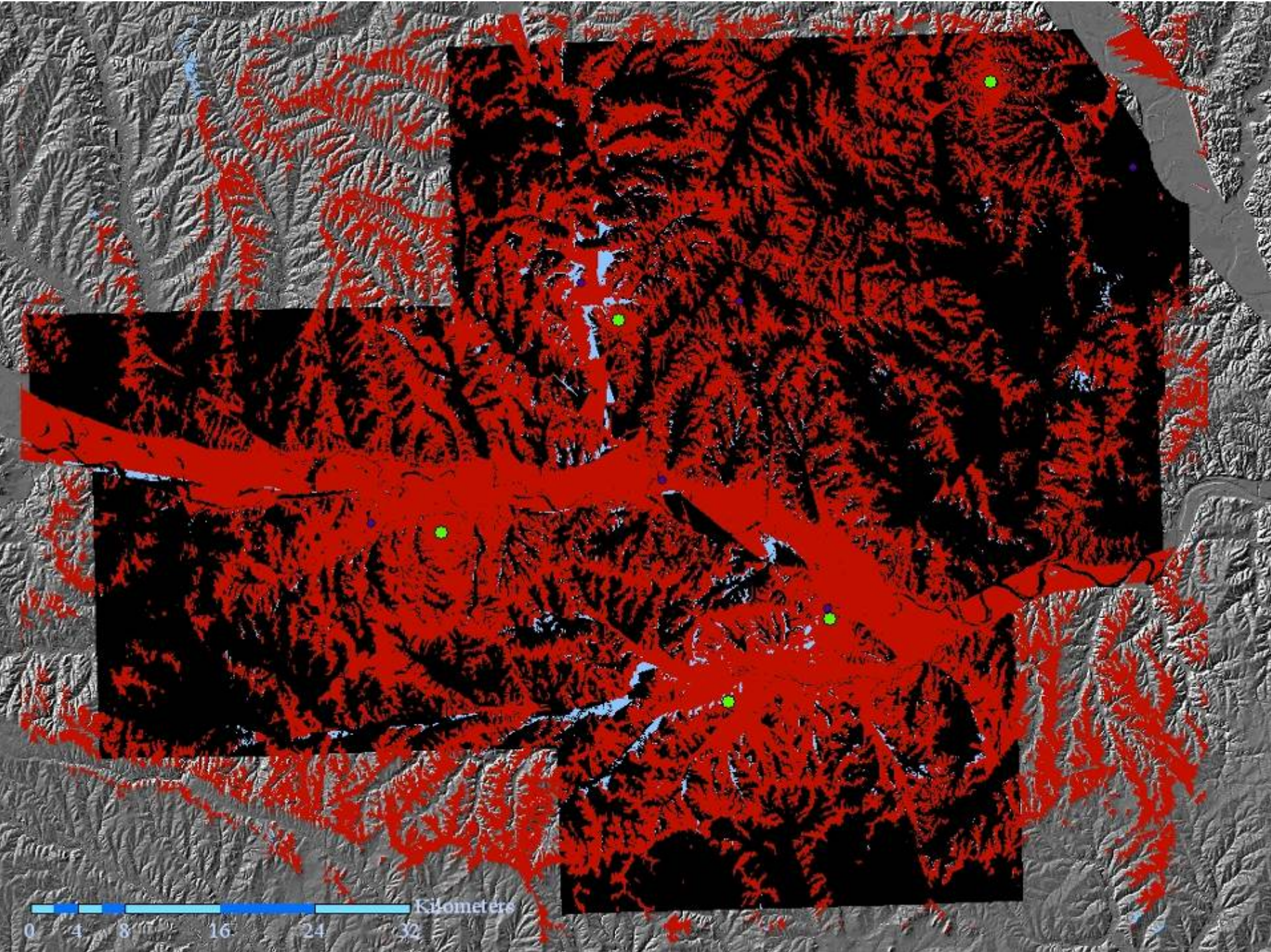
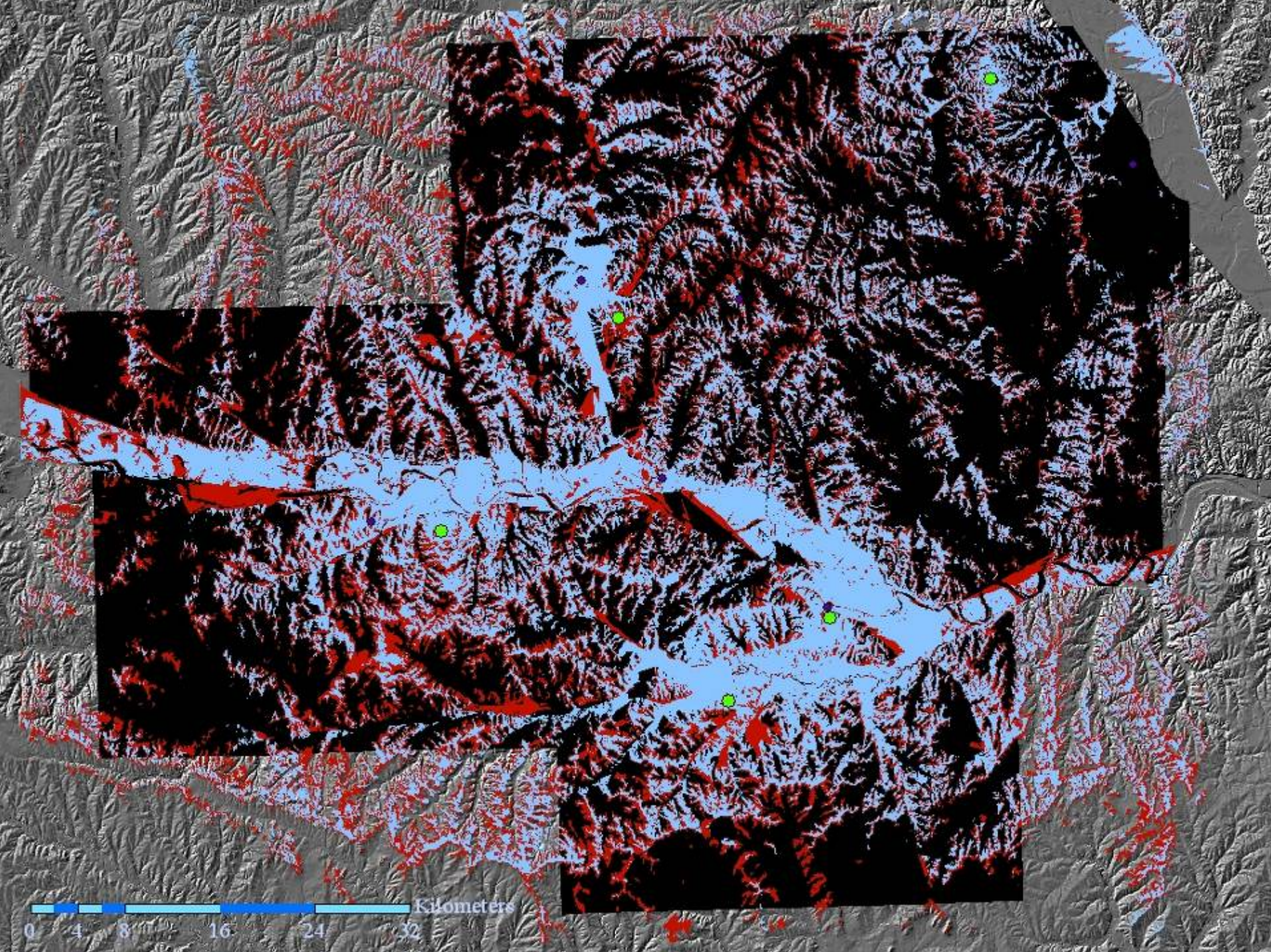
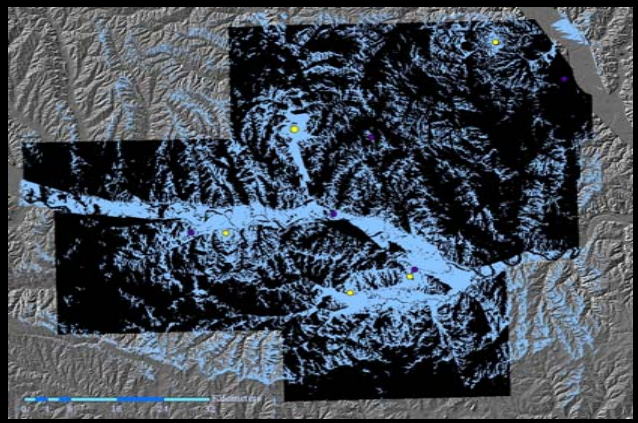

Kilometers
0 4 8 16 24 32


Kilometers
0
4
8
16
24
32

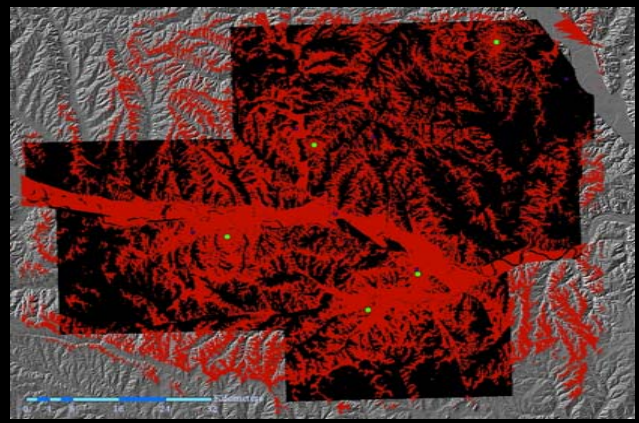
Results

My towers



25.62% Coverage

FCC Registered towers



32.28% Coverage

Ideas for Improvement:

- Go out and inspect areas of proposed placement and integrate GPS technology to determine locations
- Map contours to help emphasize high points