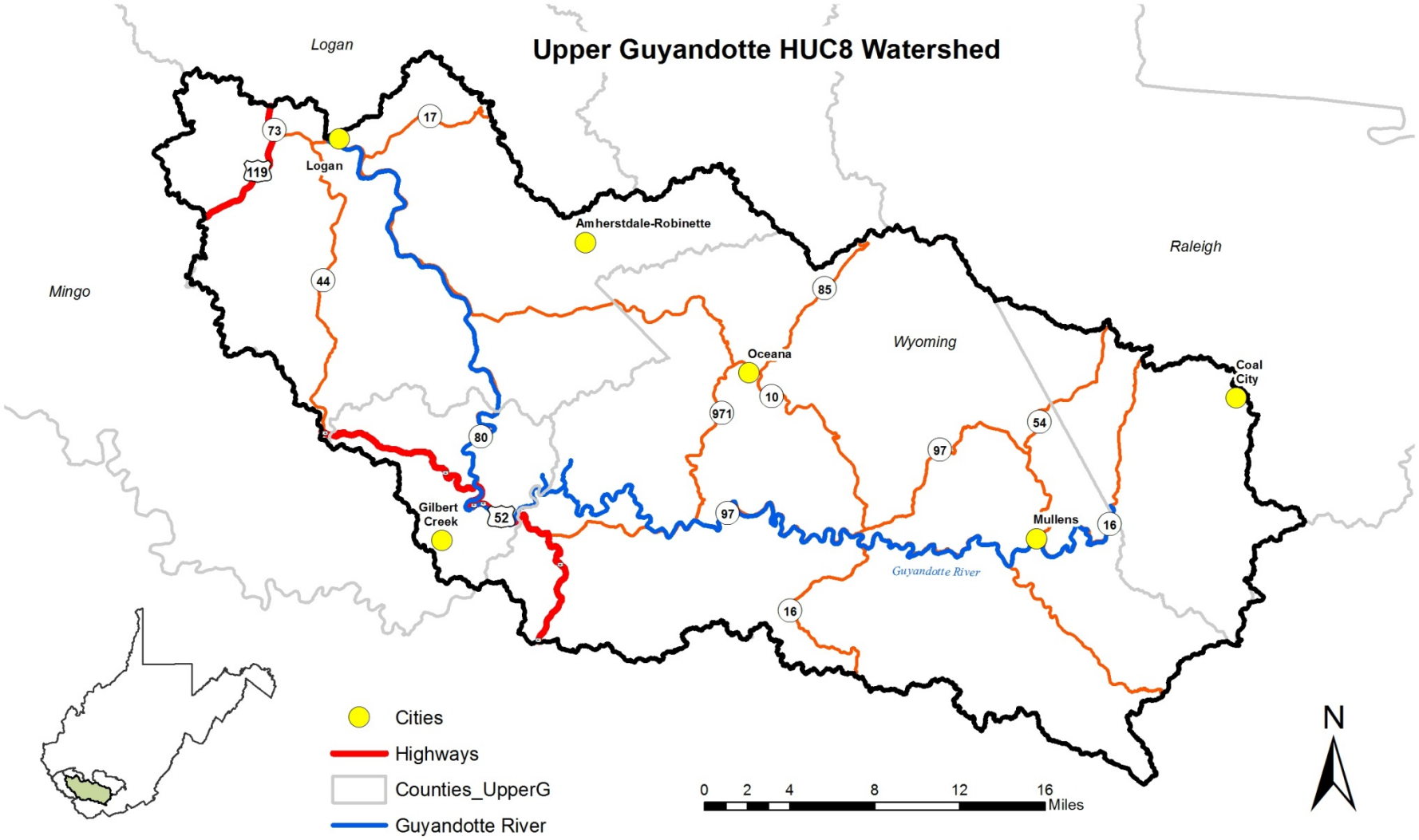
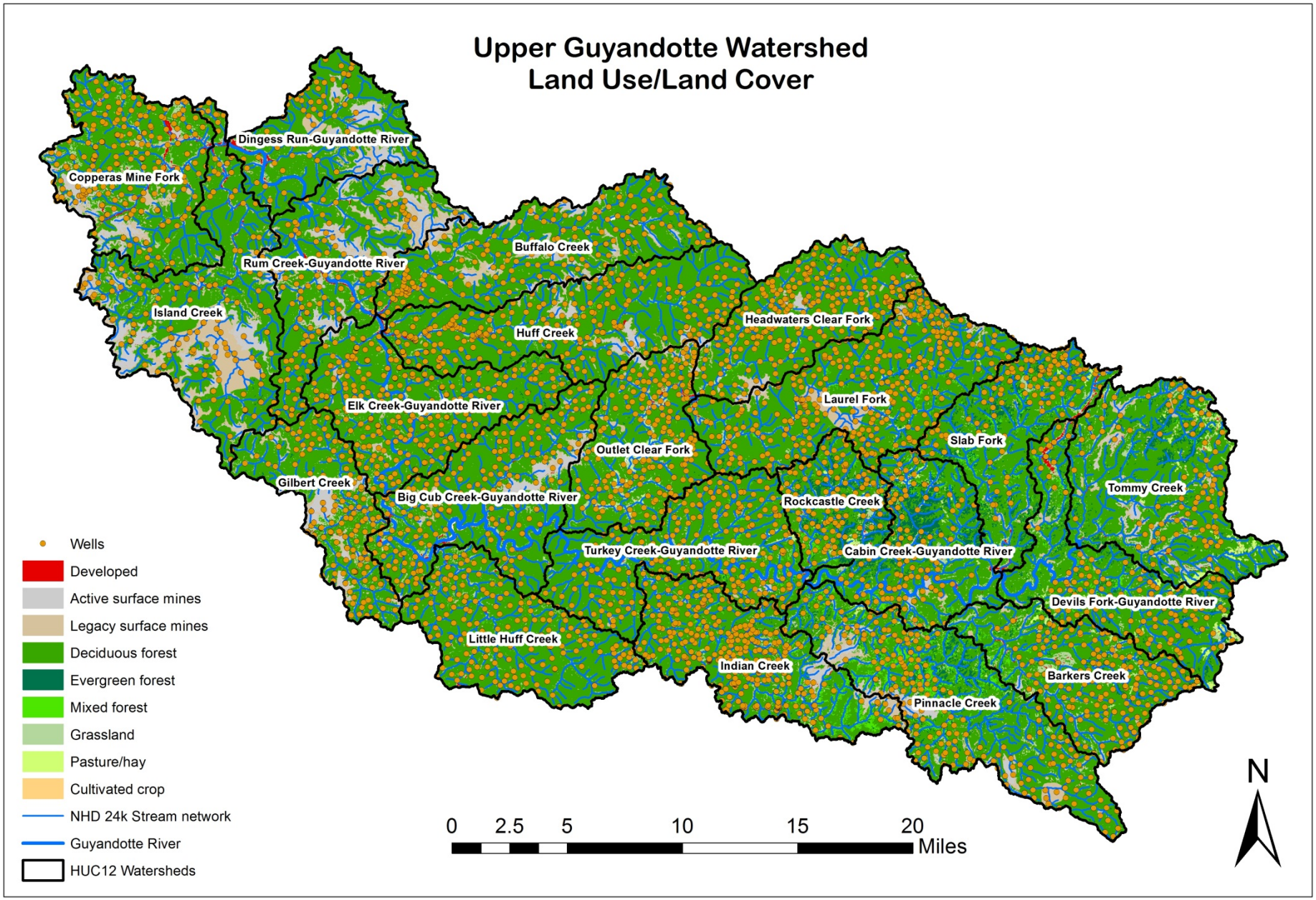
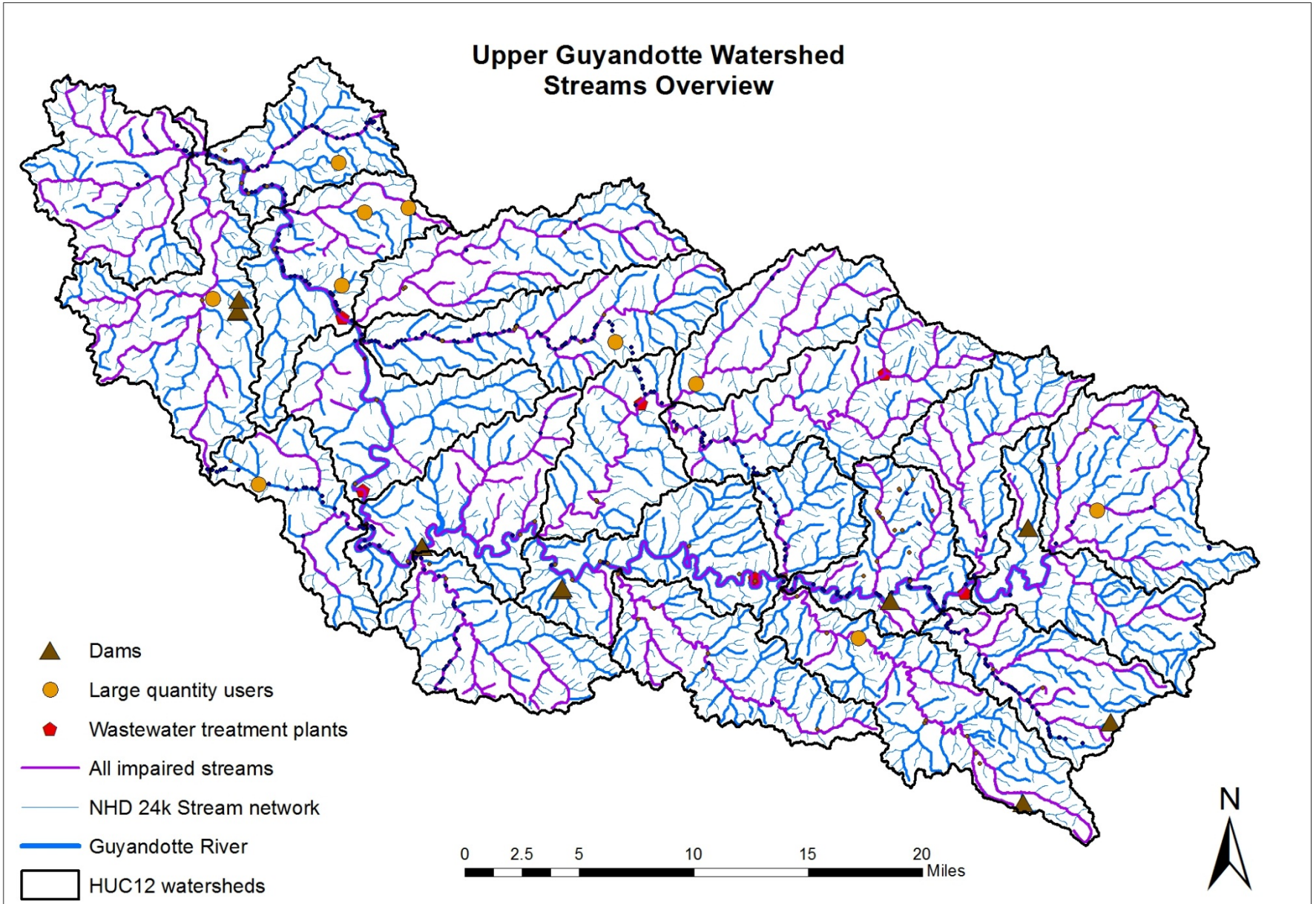
WEST VIRGINIA WATERSHED ASSESSMENT PILOT PROJECT

Elk River, Southeast Flyfishing forum

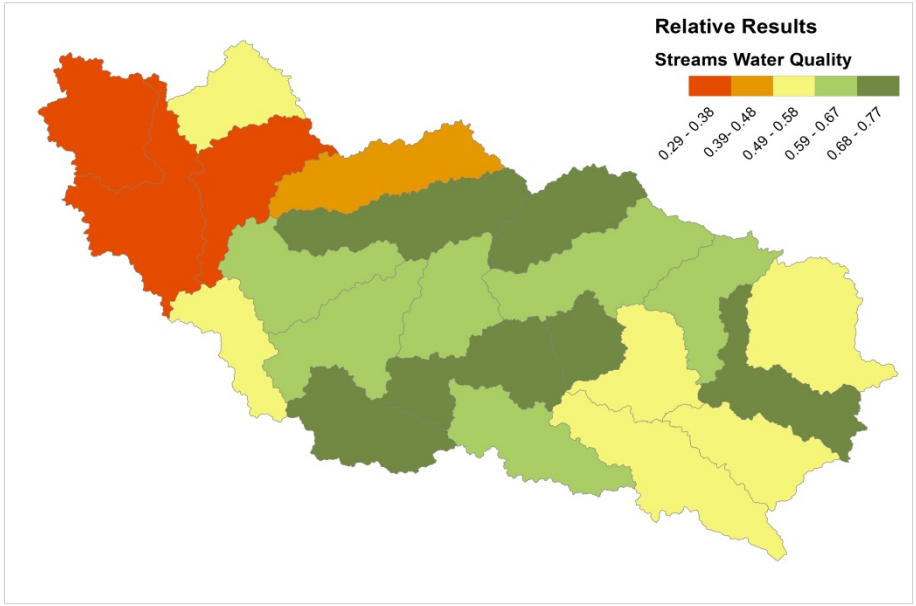
Upper Guyandotte Watershed Assessment
October 10,2012

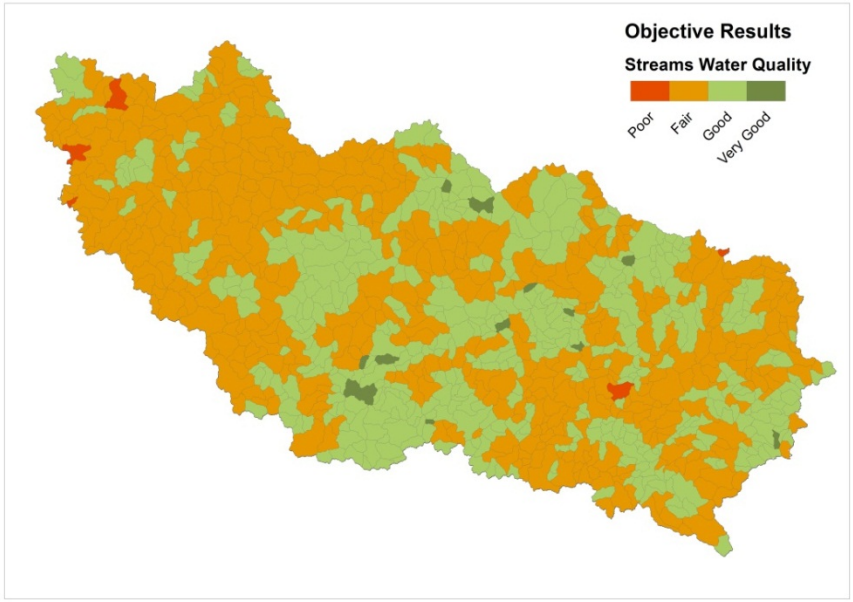

Upper Guyandotte HUC8 Watershed
Logan
Mingo
Raleigh
Wyoming
Logan
Amherstdale-Robinette
Oceana
Coal City
Gilbert Creek
Mullens
Guyandotte River
73
119
17
44
85
10
971
80
52
97
54
16
Cities
Highways
Counties_UpperG
Guyandotte River
0 2 4 8 12 16
Miles
N

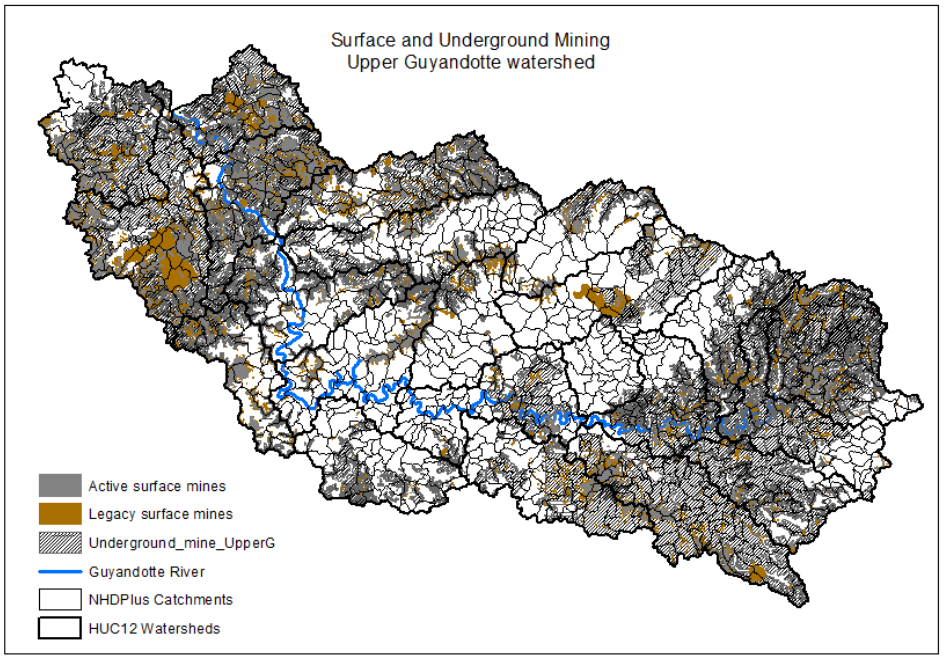

Upper Guyandotte Watershed
Land Use/Land Cover
Dingess Run-Guyandotte River
Copperas Mine Fork
Buffalo Creek
Rum Creek-Guyandotte River
Island Creek
Huff Creek
Headwaters Clear Fork
Elk Creek-Guyandotte River
Laurel Fork
Slab Fork
Outlet Clear Fork
Gilbert Creek
Big Cub Creek-Guyandotte River
Rockcastle Creek
Tommy Creek
Turkey Creek-Guyandotte River
Cabin Creek-Guyandotte River
Devils Fork-Guyandotte River
Little Huff Creek
Indian Creek
Barkers Creek
Pinnacle Creek
Wells
Developed
Active surface mines
Legacy surface mines
Deciduous forest
Evergreen forest
Mixed forest
Grassland
Pasture/hay
Cultivated crop
NHD 24k Stream network
Guyandotte River
HUC12 Watersheds
0 2.5 5 10 15 20
Miles
N


Upper Guyandotte Watershed
Streams Overview
Dams
Large quantity users
Wastewater treatment plants
All impaired streams
NHD 24k Stream network
Guyandotte River
HUC12 watersheds
0
2.5
5
10
15
20
Miles
N

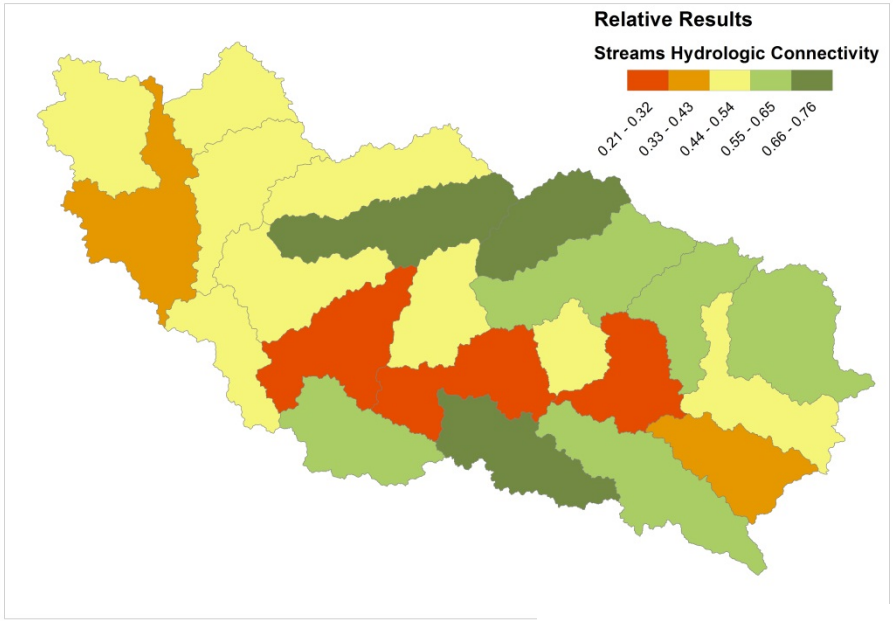
Streams: Water Quality

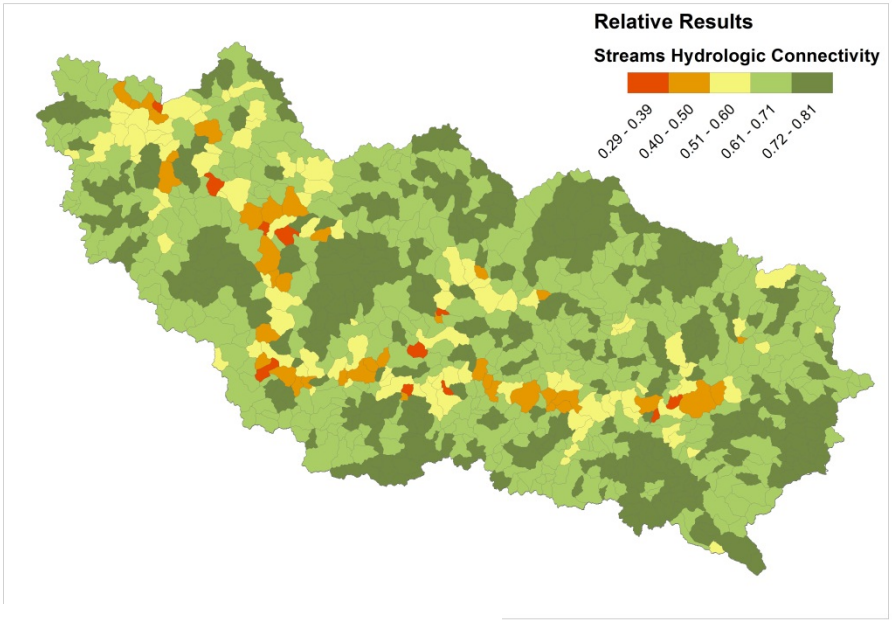






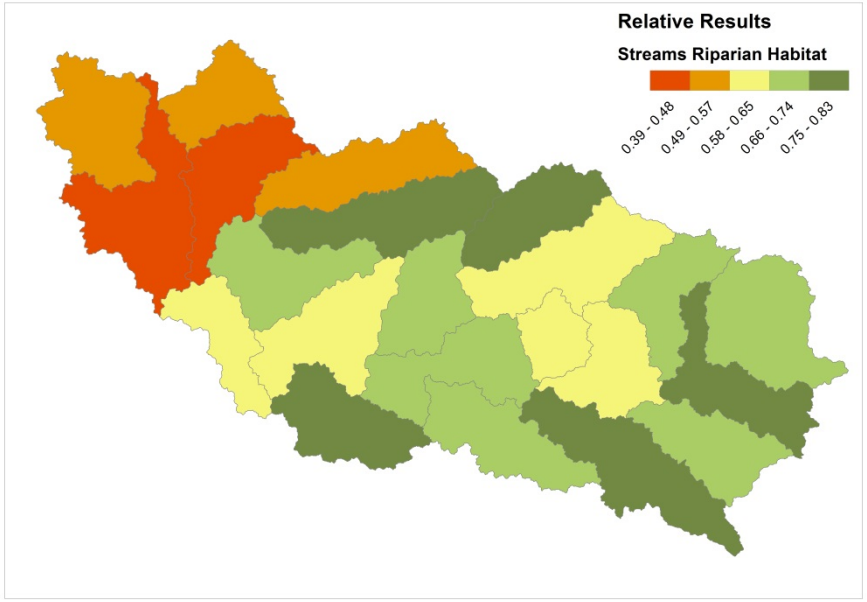
Streams: Hydrologic Connectivity

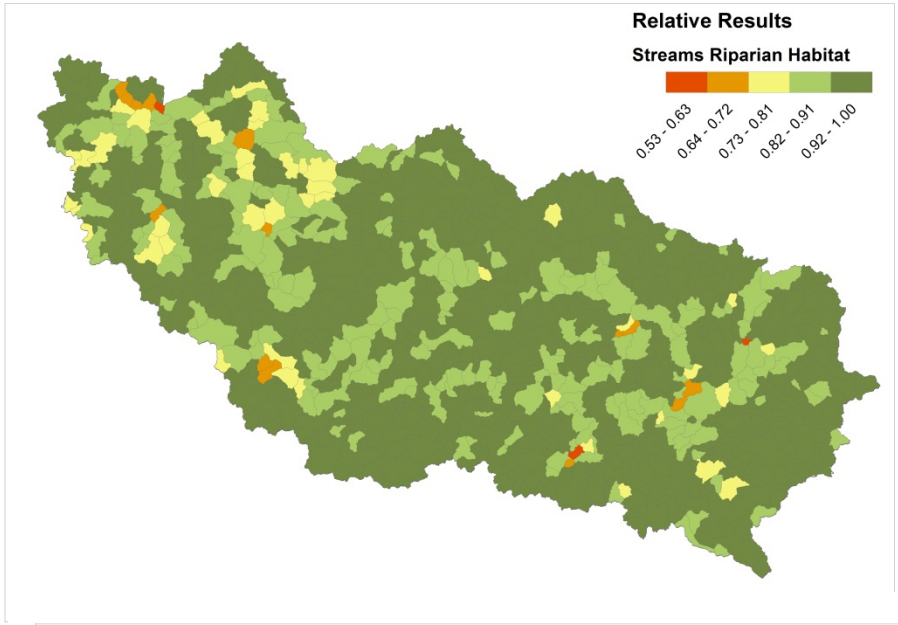




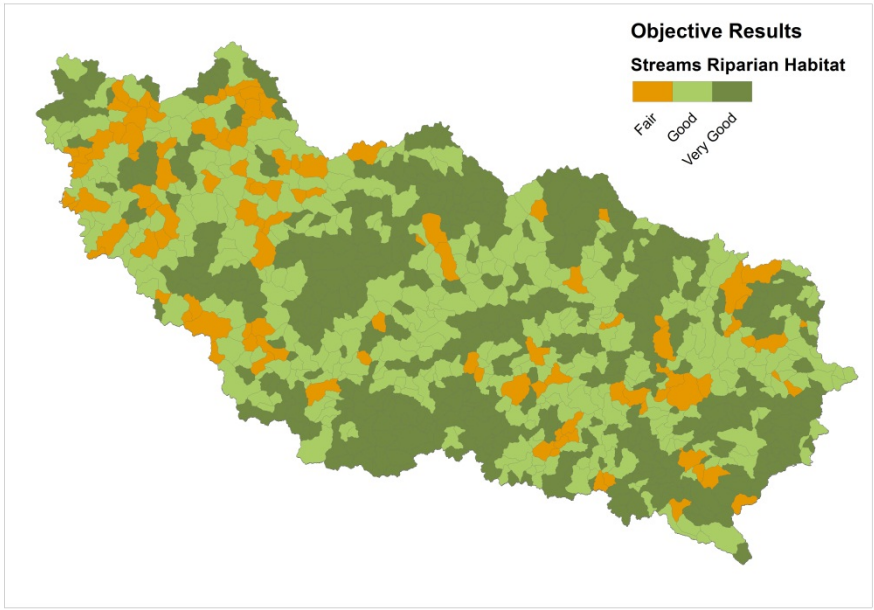
Roads
Dams
Headwaters
Riparian forest

Streams: Riparian Habitat

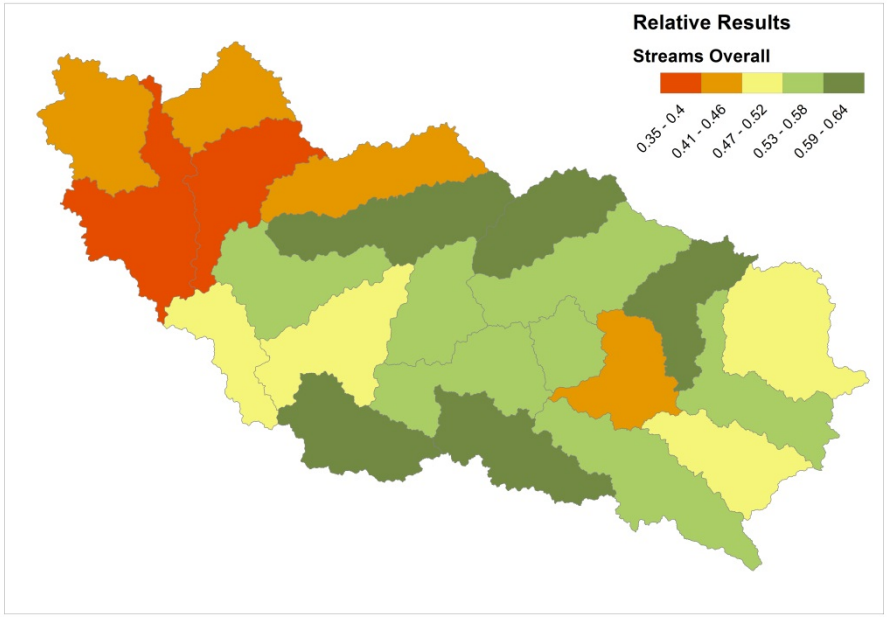


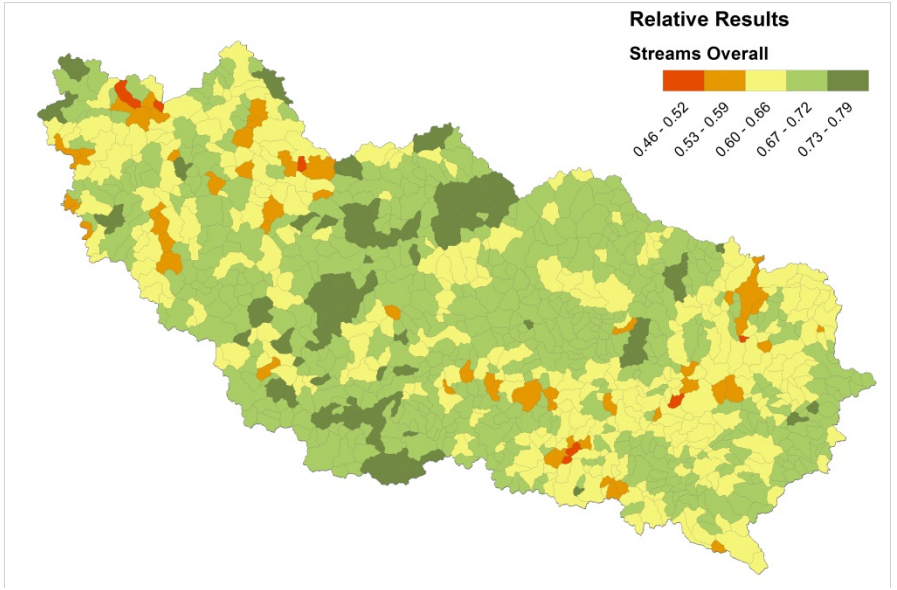


Mining
Wells
Roads
Land Cover

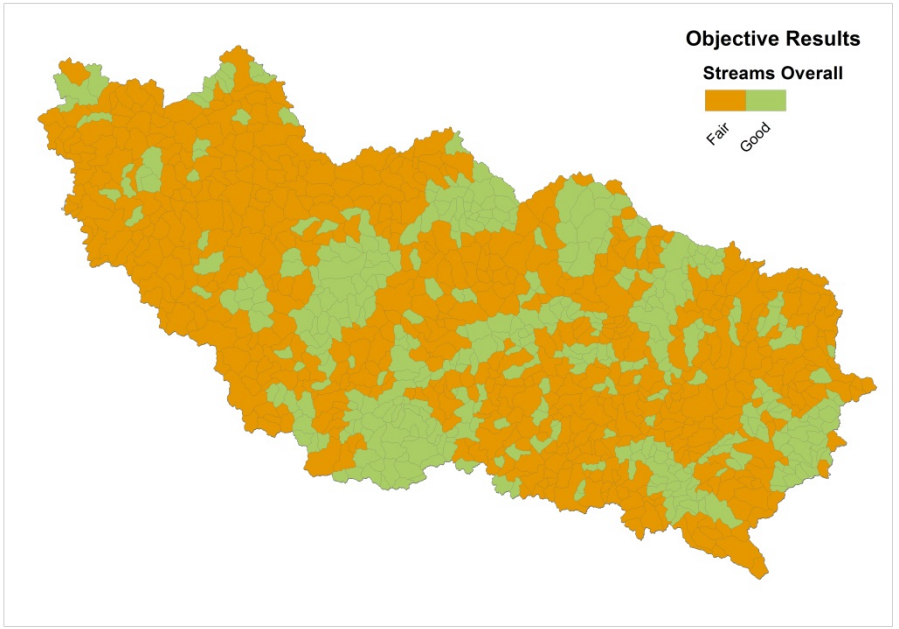


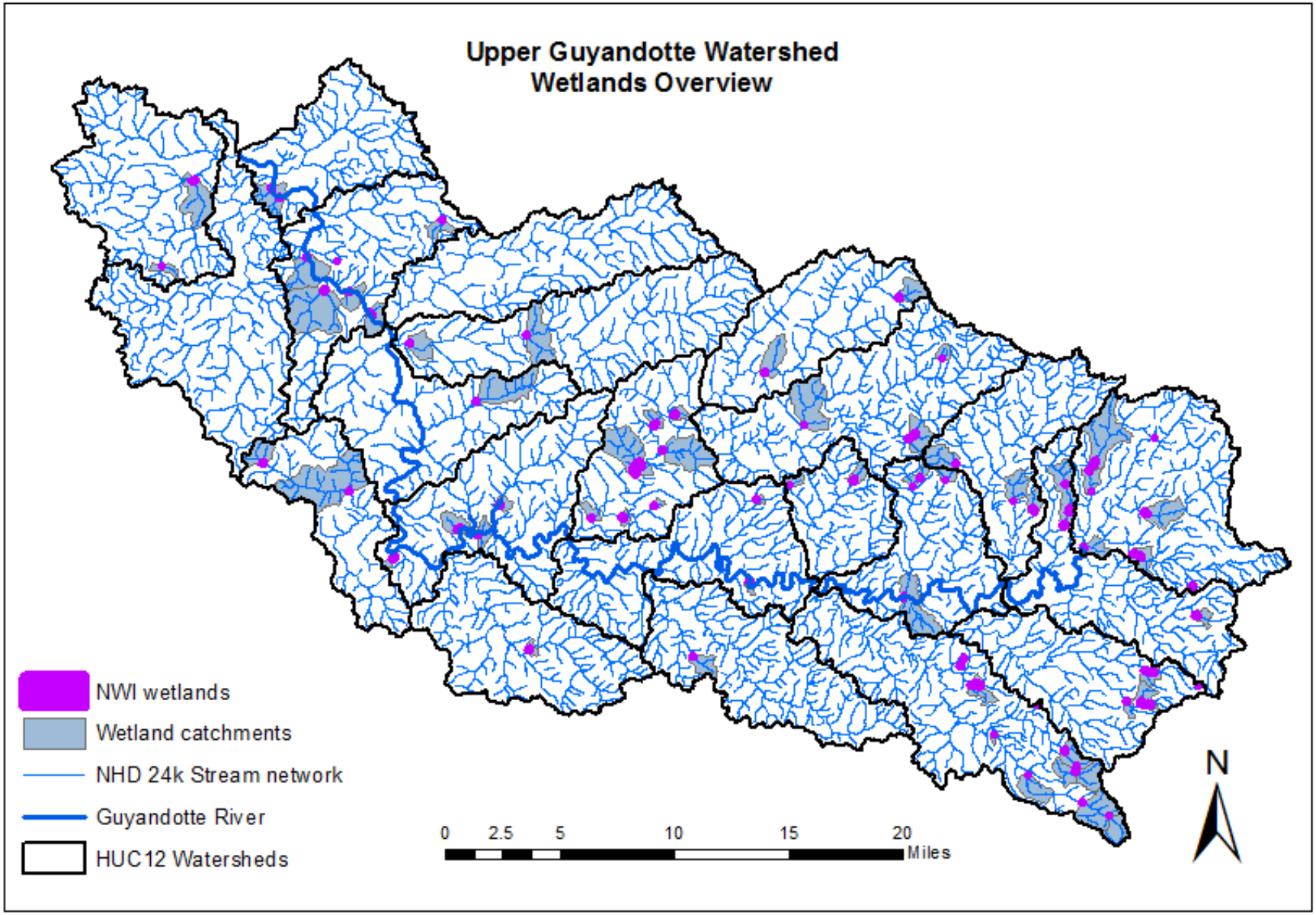
Streams: Overall



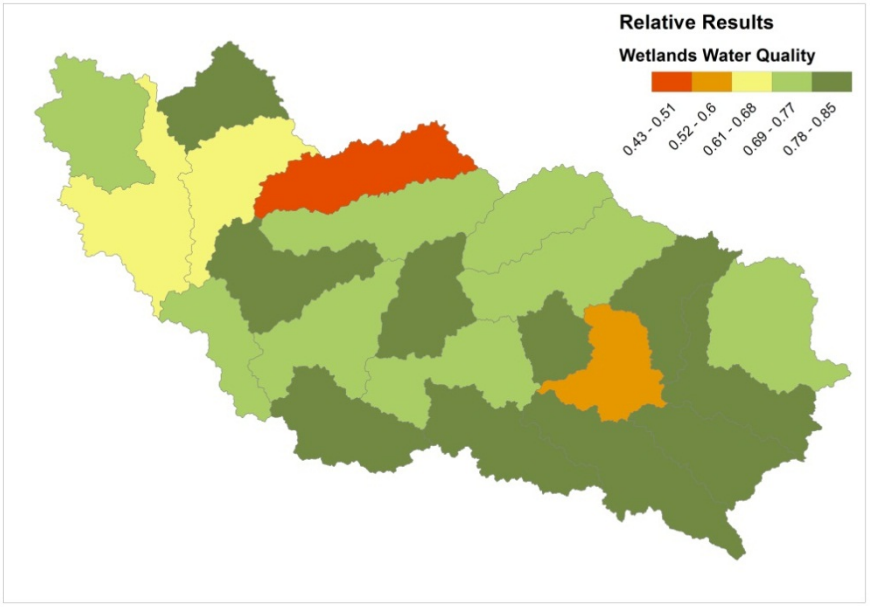


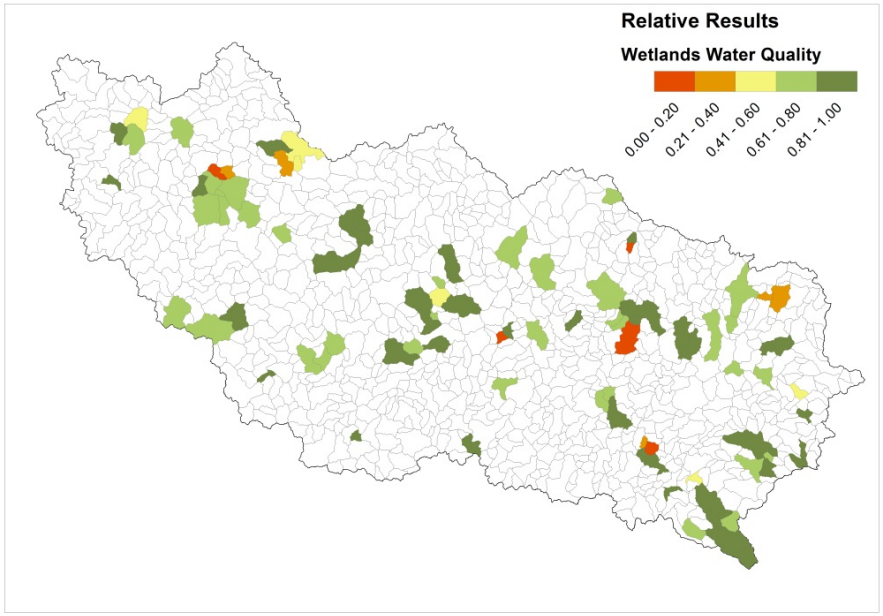
Little variation in results with objective method

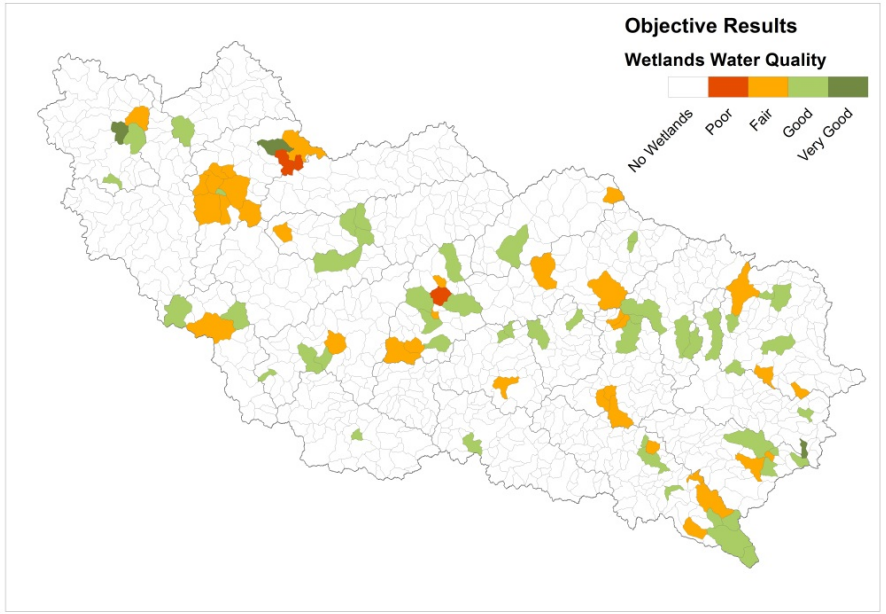



Upper Guyandotte Watershed
Wetlands Overview
NWI wetlands
Wetland catchments
NHD 24k Stream network
Guyandotte River
HUC12 Watersheds
0
2.5
5
10
15
20
Miles
N

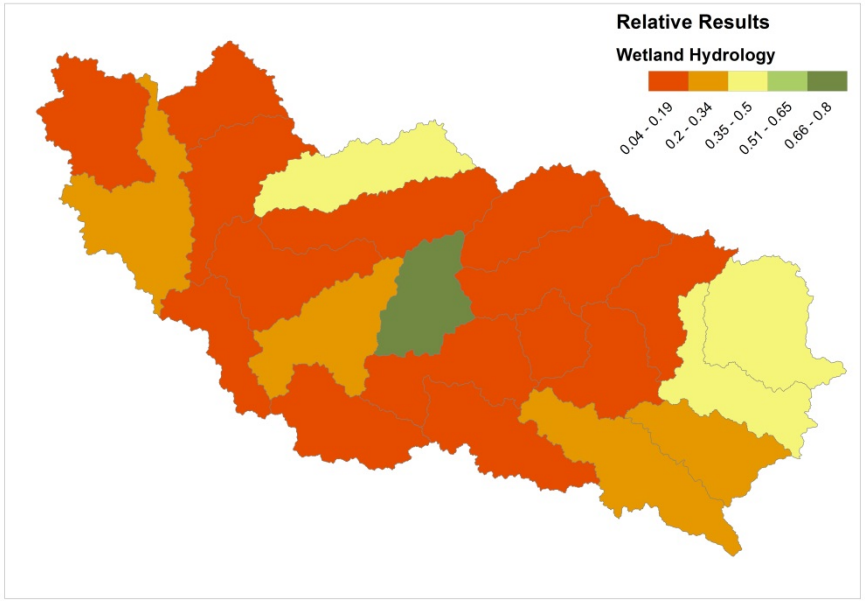
Wetlands: Water Quality

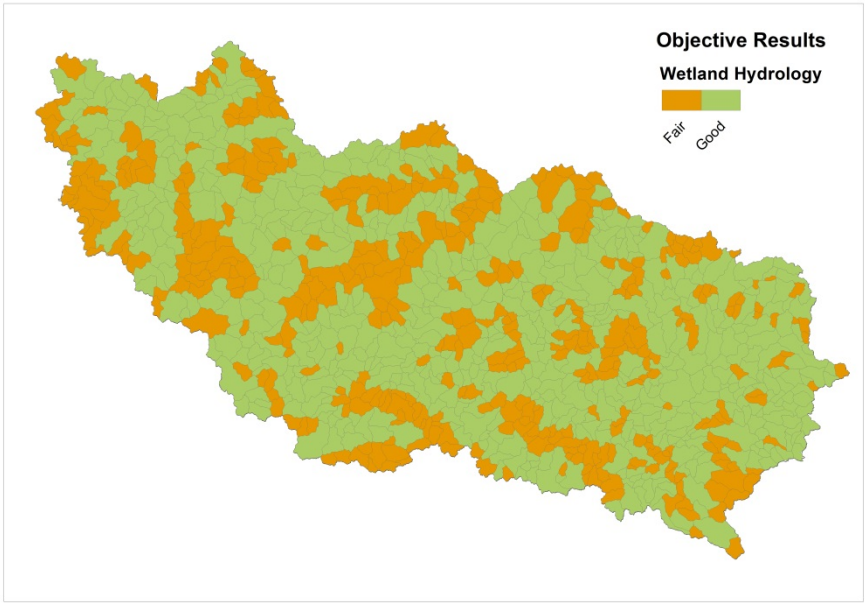


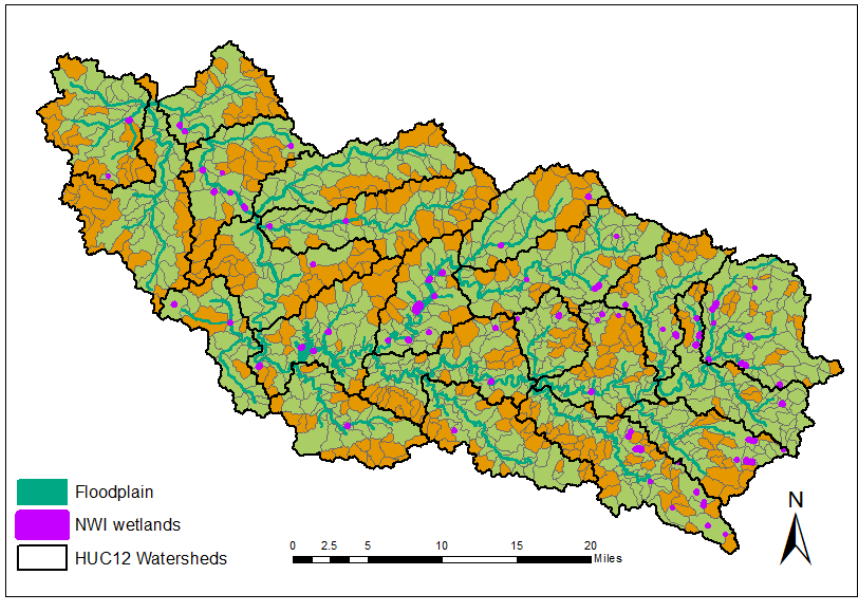




Wetlands: Hydrology

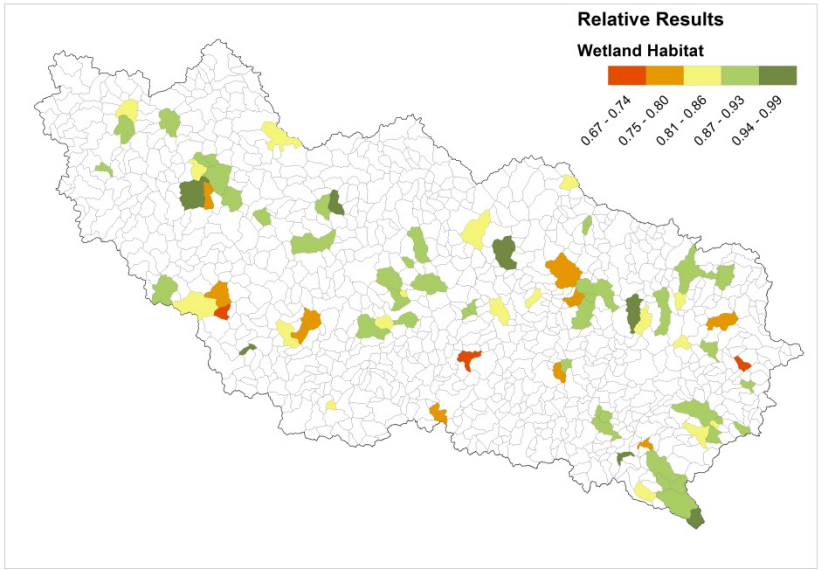


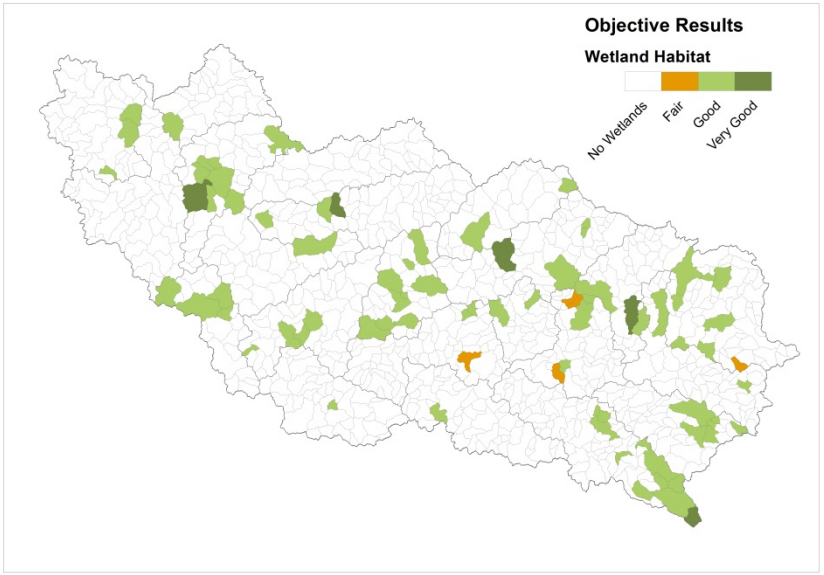




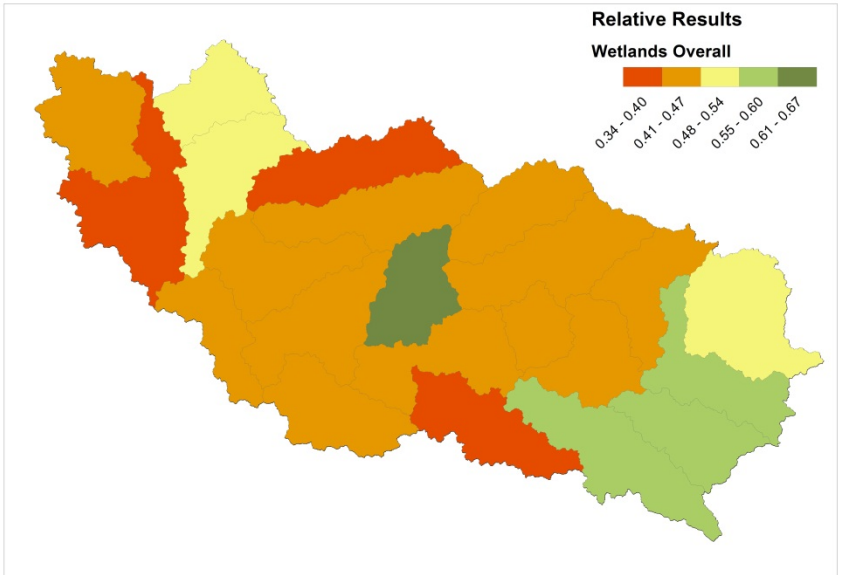
Wetland area
Forested wetlands
Floodplain
Hydric soils

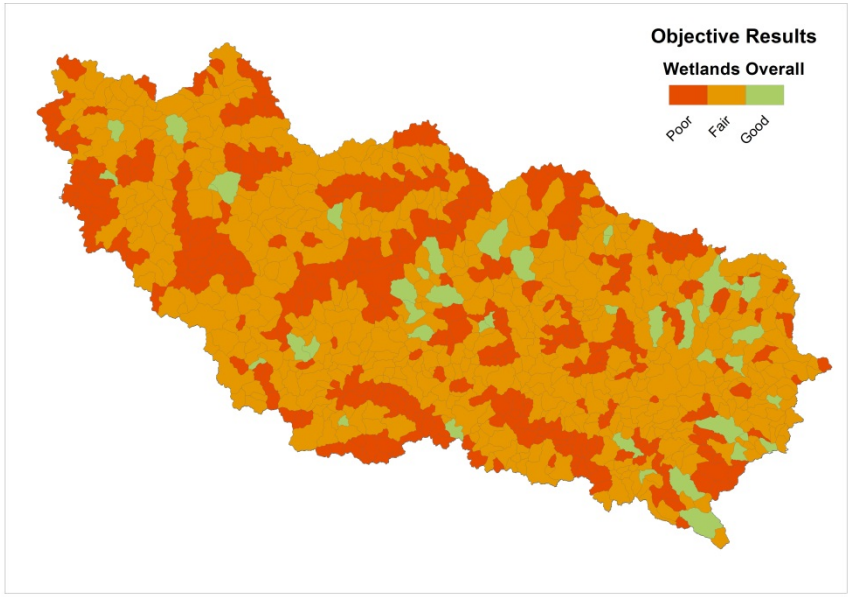
Wetlands: Wetland Habitat

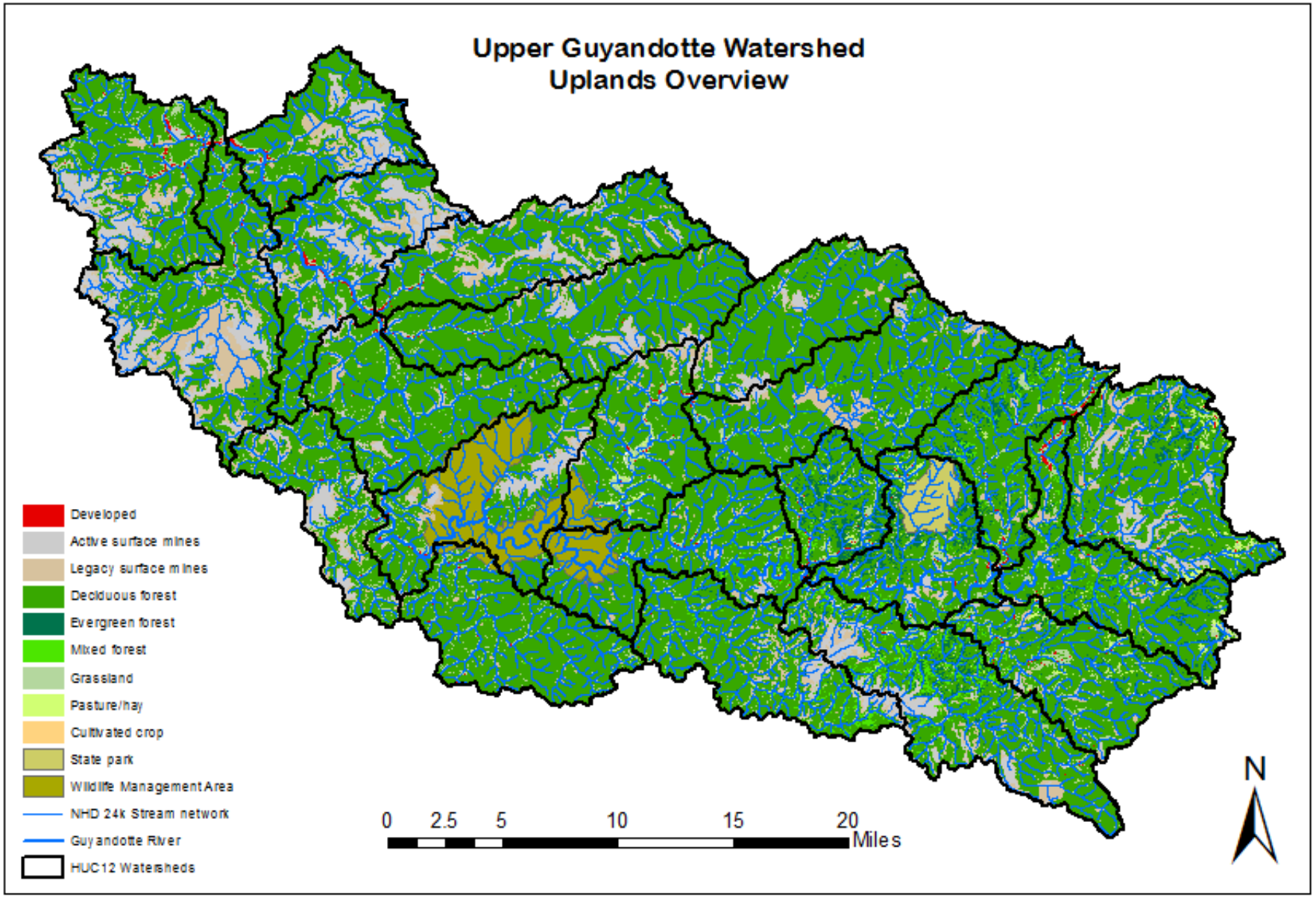




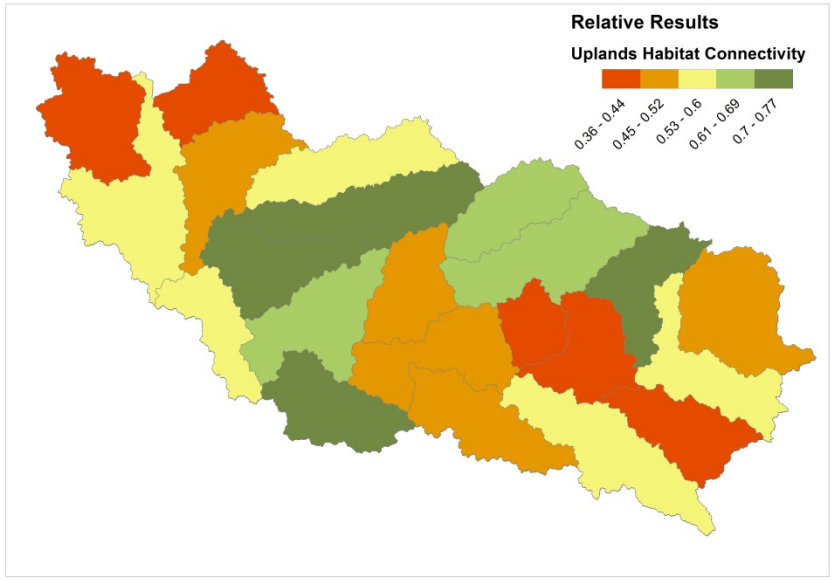
Wetlands: Overall

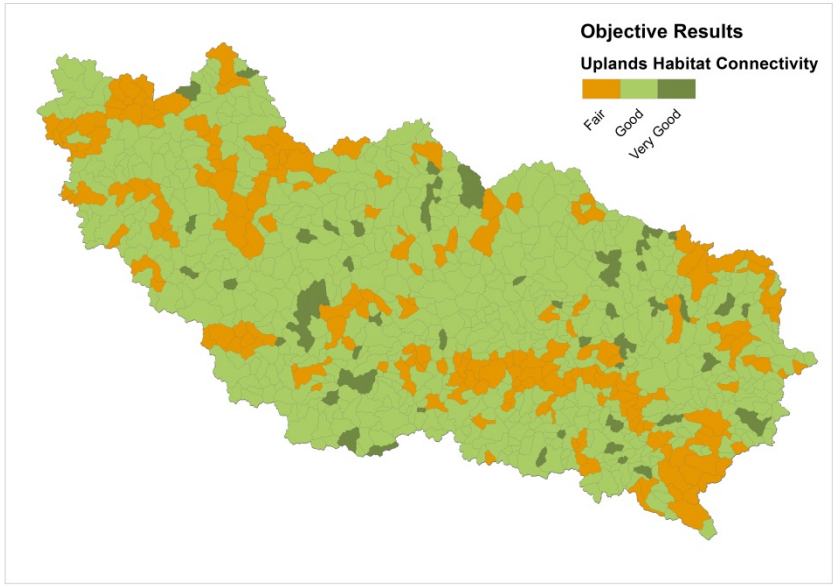


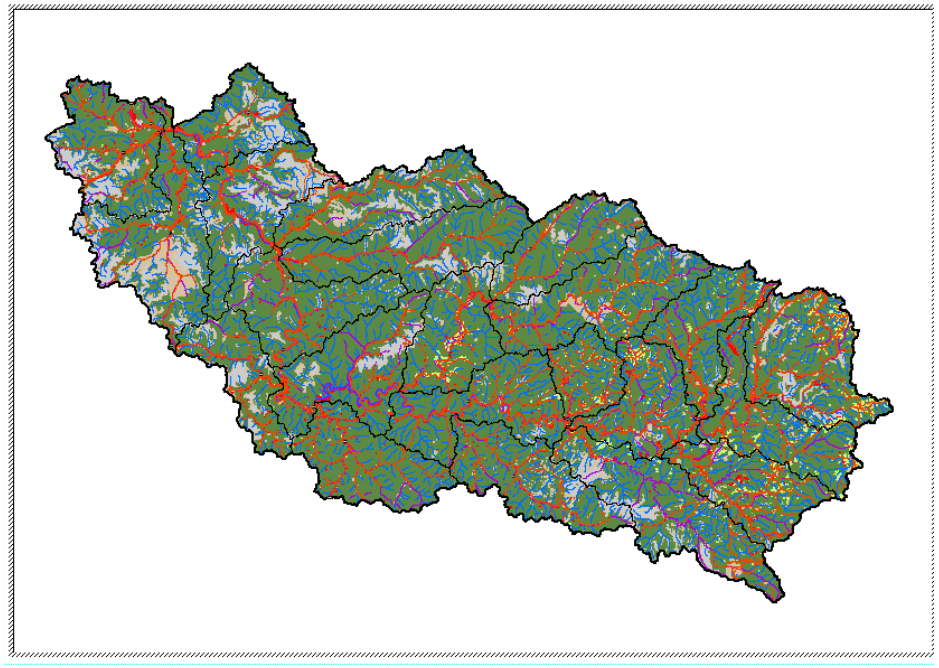



Upper Guyandotte Watershed
Uplands Overview
Developed
Active surface mines
Legacy surface mines
Deciduous forest
Evergreen forest
Mixed forest
Grassland
Pasture/hay
Cultivated crop
State park
Wildlife Management Area
NHD 24k Stream network
Guyandotte River
HUC12 Watersheds
0 2.5 5 10 15 20
Miles
N

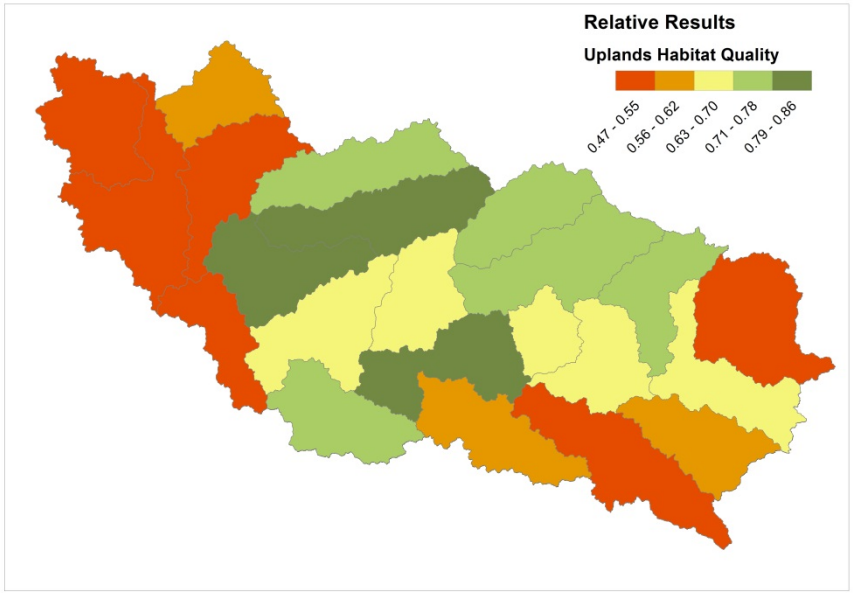
Uplands: Habitat Connectivity

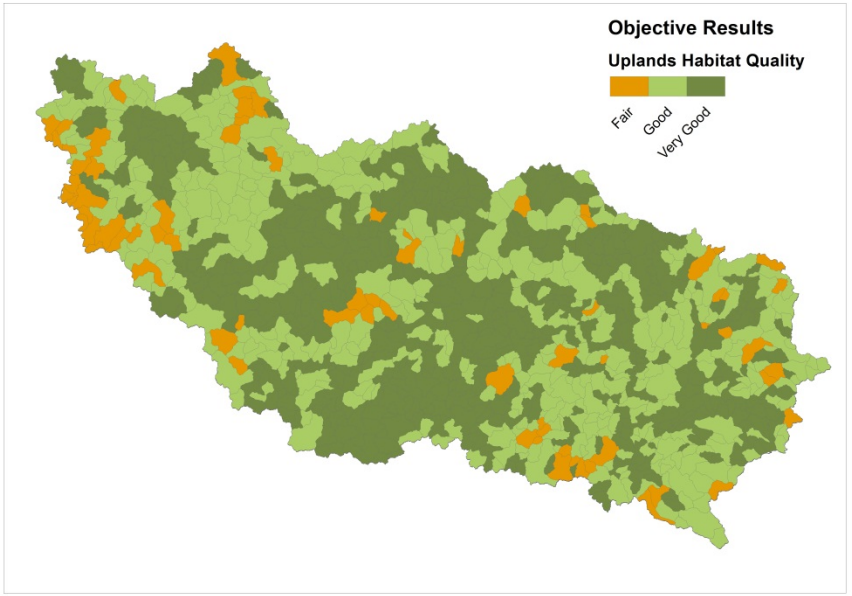




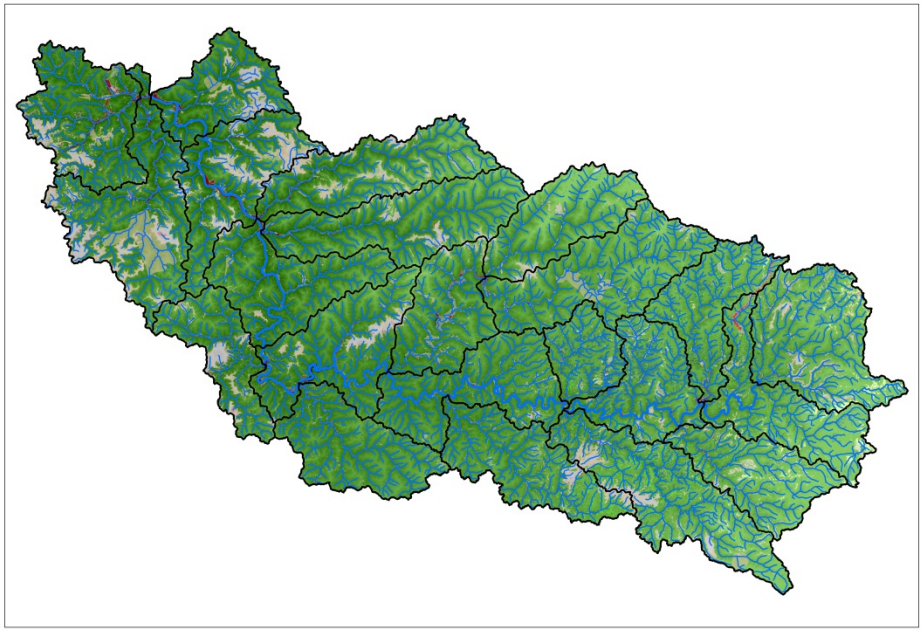


Uplands: Habitat Quality

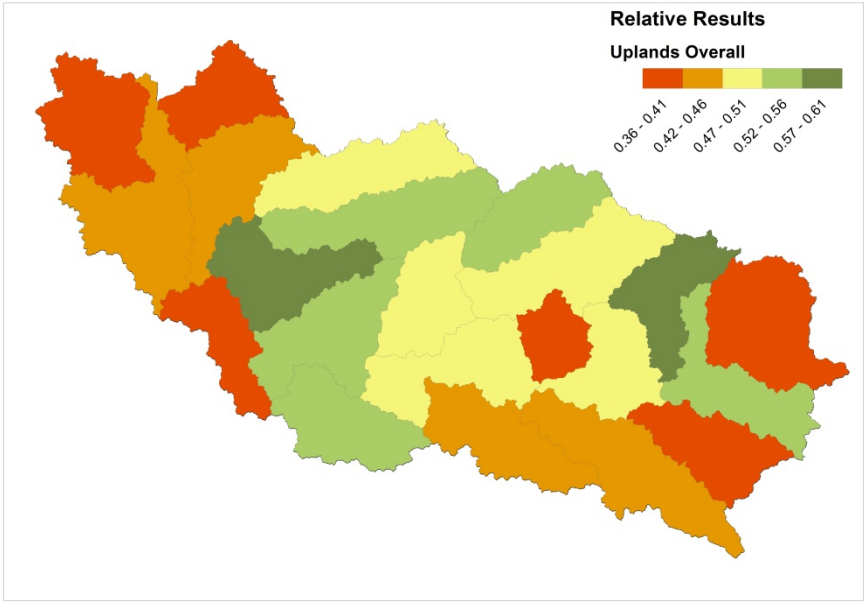


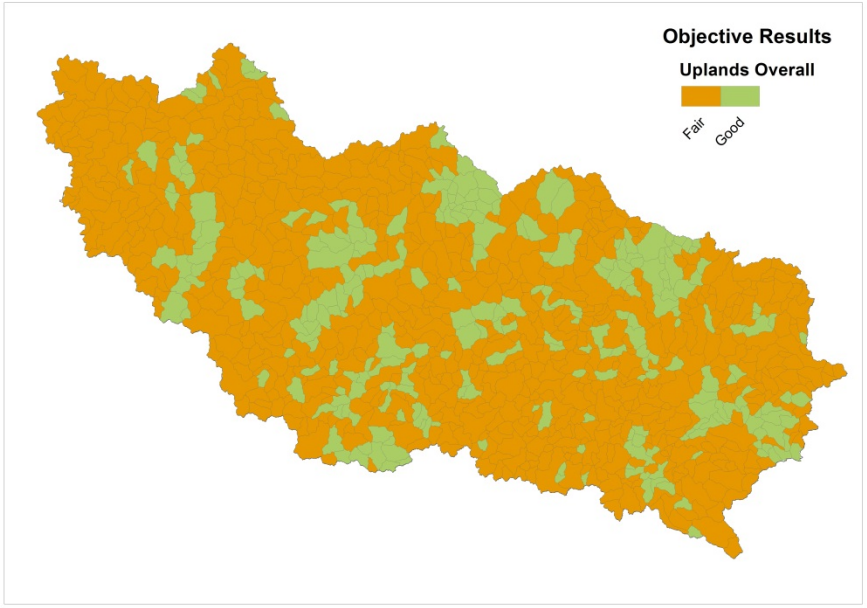


Natural cover Heterogeneity

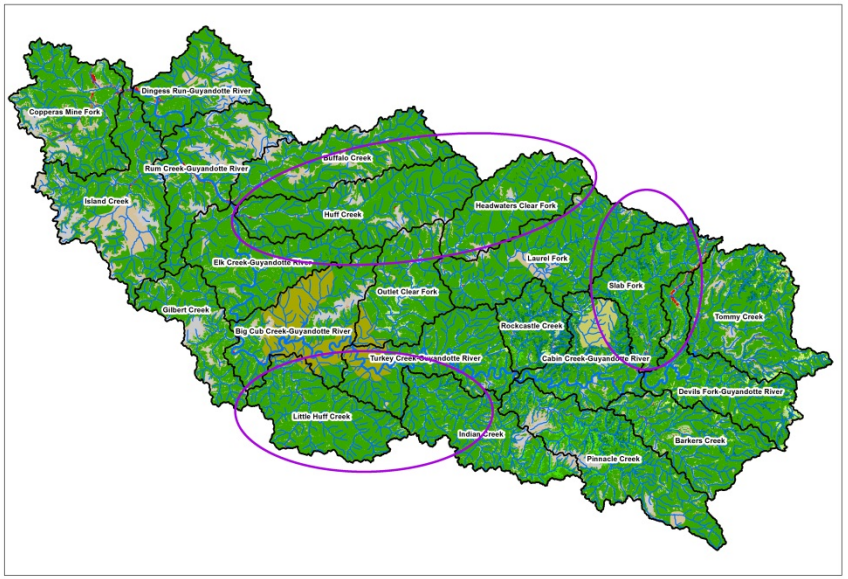


Uplands: Overall





Findings



Higher quality areas for potential protection tend to be at north and south edges of the watershed

Intermediate/fair areas for potential restoration exist throughout the watershed