

2021 Land Use Methods & Metrics

For the Land Use Methods and Metrics Outcome, “metrics” refer to measures of landscape condition related to water quality, watershed health, and community interests that can be consistently monitored over time and have sufficient resolution and accuracy to be relevant to county-level decisions. Land cover/use metrics will be monitored and updated every four years following the production of the high-resolution data. Stream entrenchment ratios, reflecting the potential disconnection of streams from their floodplains, will be updated as new LiDAR data are produced (every 5-10 years). Demographic and housing derived measures (e.g., population density and household income) will be updated every four years along with the land use/cover metrics based on the latest information available from the American Community Survey or Decennial Census. The following metrics are proposed to support this outcome:

Water Quality (land-river segments and counties)

1. Total Nitrogen Edge-Of-Stream Load (kg/yr)
2. Total Phosphorus Edge-Of-Stream Load (kg/yr)
3. Total Suspended Sediment Edge-Of-Stream Load (kg/yr)
4. Total Nitrogen Edge-Of-Tide Load (kg/yr)
5. Total Phosphorus Edge-Of-Tide Load (kg/yr)
6. Total Suspended Sediment Edge-Of-Tide Load (kg/yr)

Watershed Health (local and accumulated measures at the NHD+ catchment scale)

1. Natural Cover, e.g., trees, wetlands, water (% area)
2. Tree Canopy (% area)
3. Tree Canopy in the 30-meter Riparian Zone (% area)
4. Impervious Cover (% area)
5. Agriculture (% area)
6. Mining (% area)
7. Population Density
8. Stream channel entrenchment ratio

Communities (Census Tracts/Places categorized by income, age, race/ethnicity, and language)

1. Natural Cover, e.g., trees, wetlands, water (% area)
2. Tree canopy (% area)
3. Tree Canopy in the 10-meter Riparian Zone (% area)
4. Impervious Cover (% area)
5. Population Density
6. Median household income