

Watershed Function Indicators for Troublesome Creek Local Watershed Plan

Tetra Tech, Inc.



Imperviousness

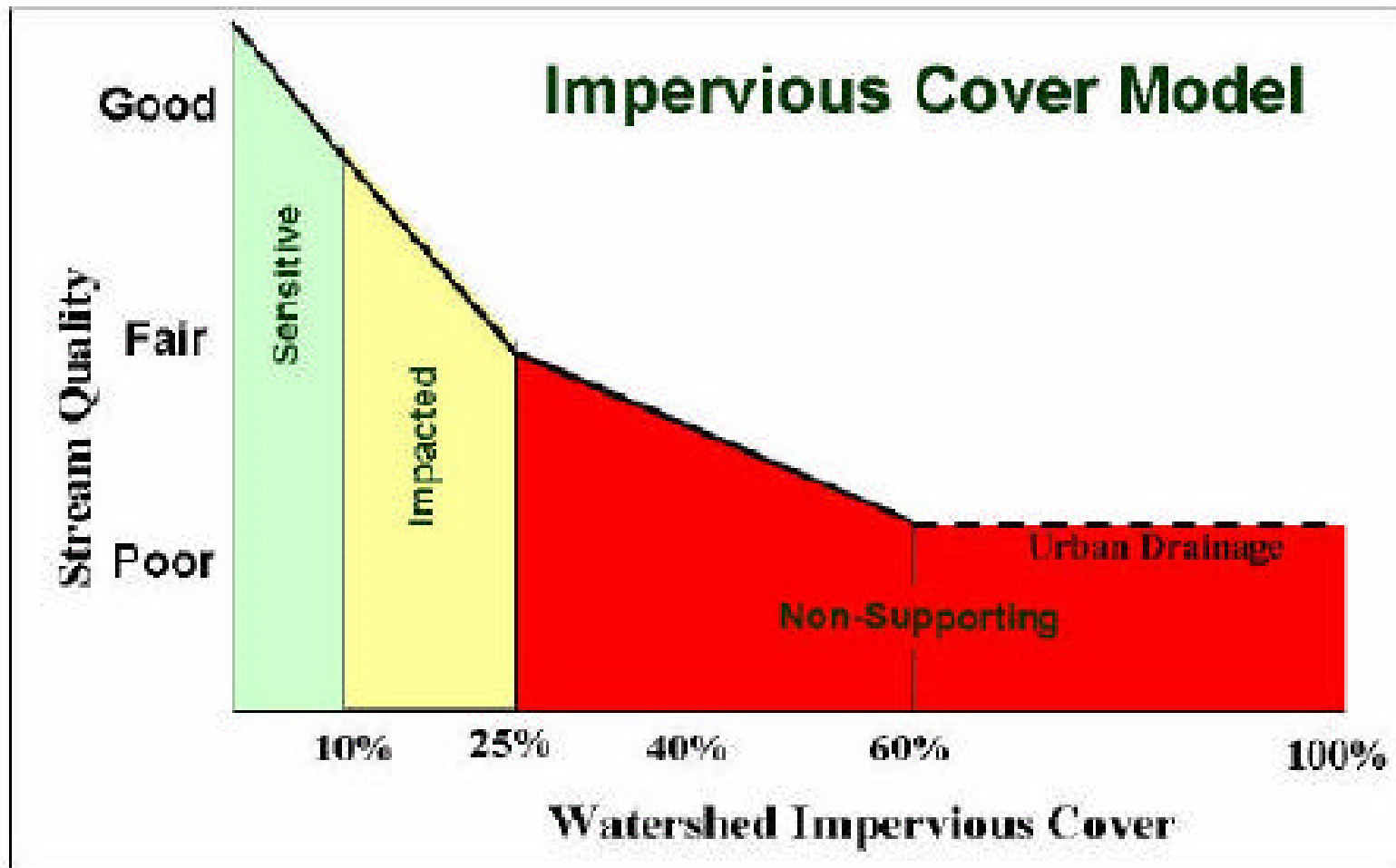
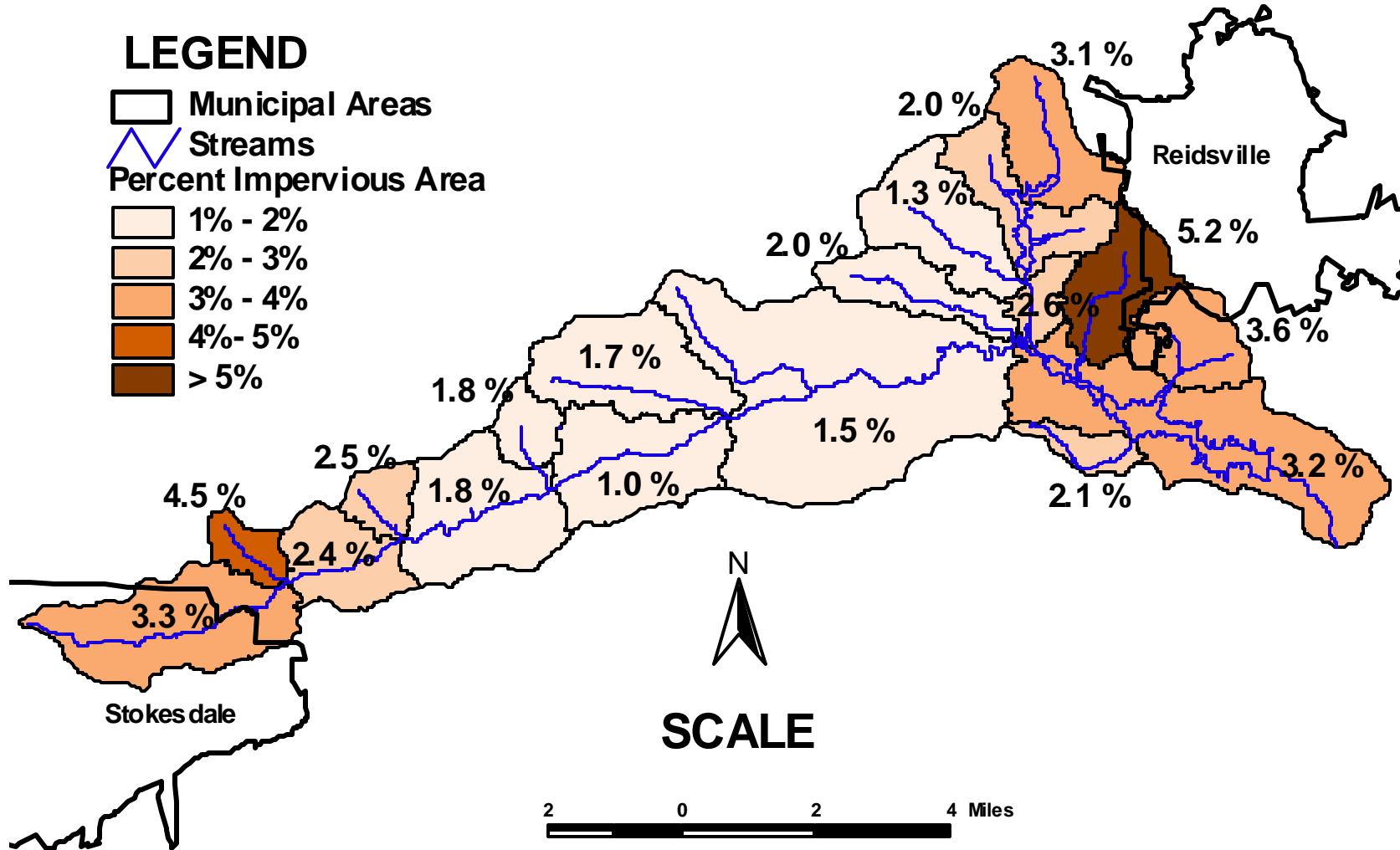
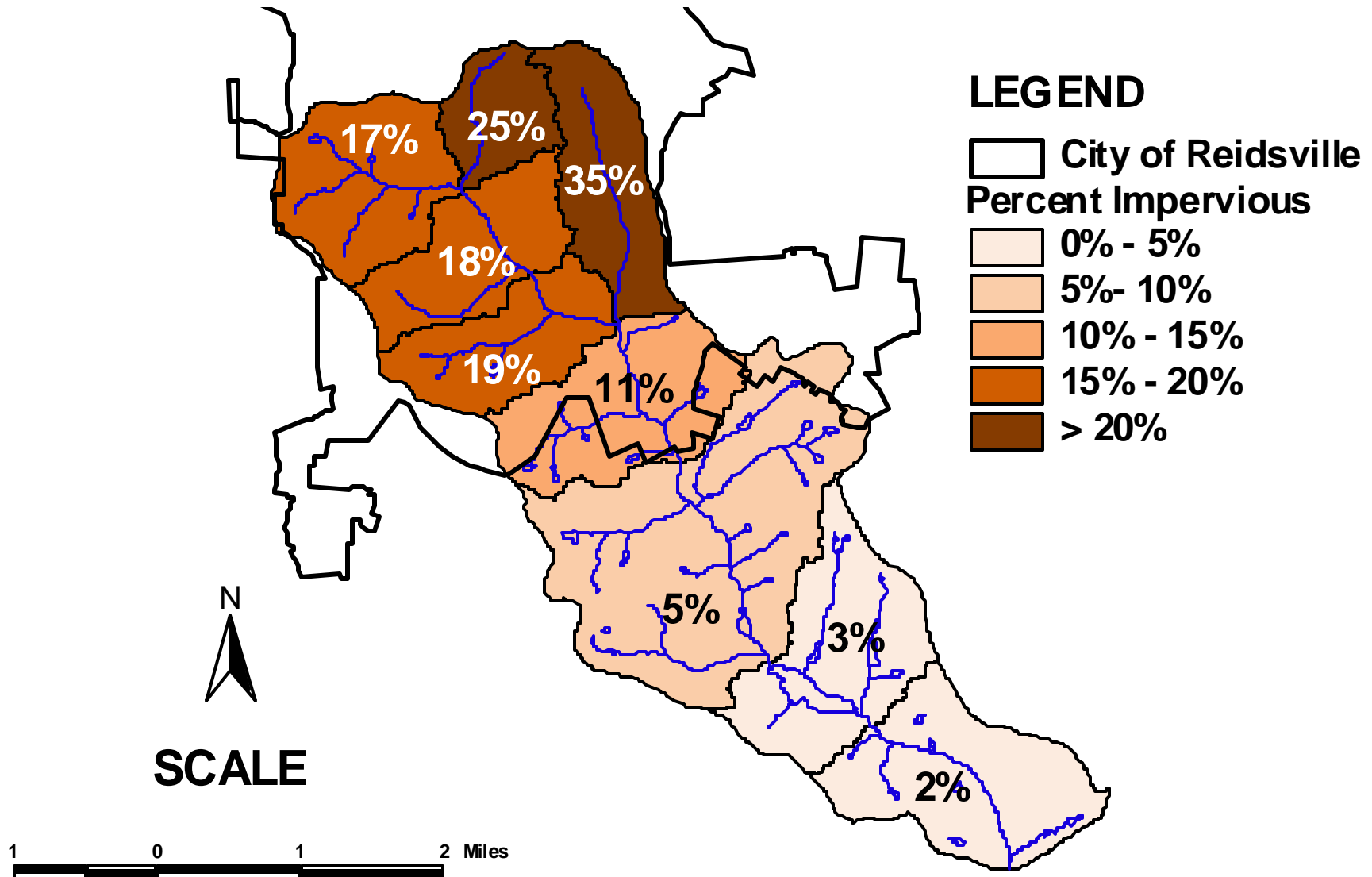


Figure 1 Impervious Cover Model
Source: Schueler, 1994

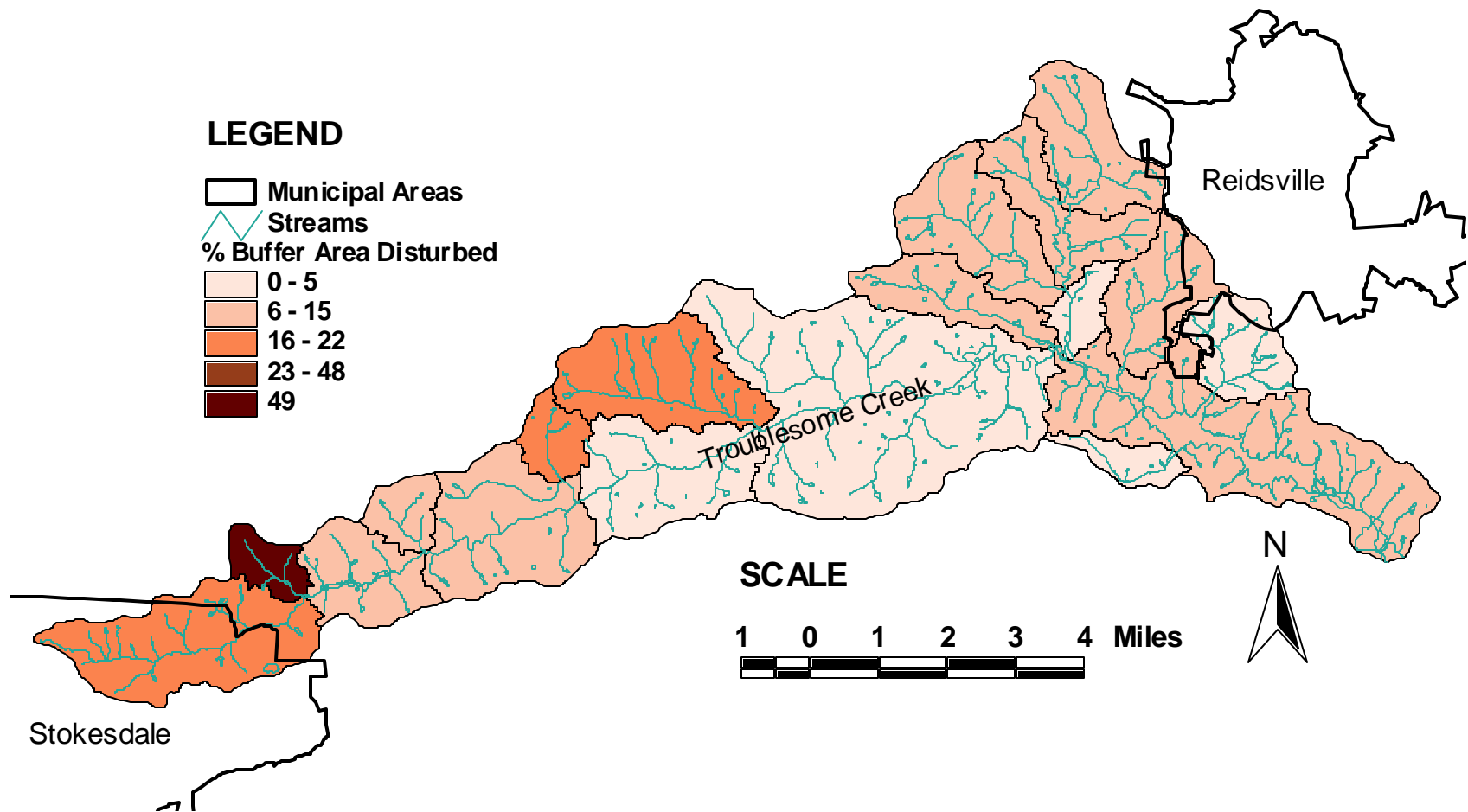
Troublesome Creek - Imperviousness



Little Troublesome Creek - Imperviousness

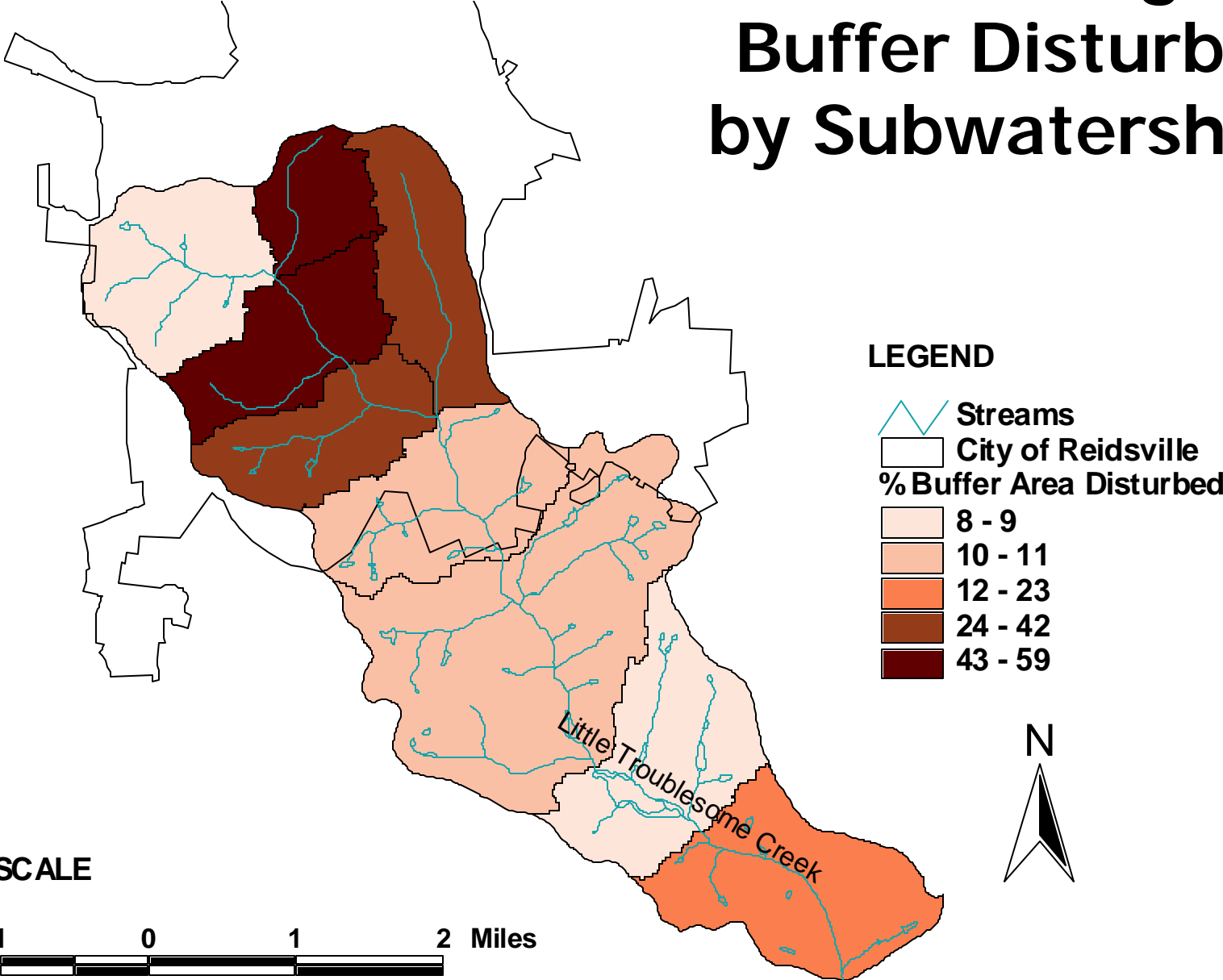


Troublesome Creek - Percentage of Buffer Disturbed by Subwatershed



Watershed Average: 90% stream buffers undisturbed

Little Troublesome Creek - Percentage of Buffer Disturbed by Subwatershed



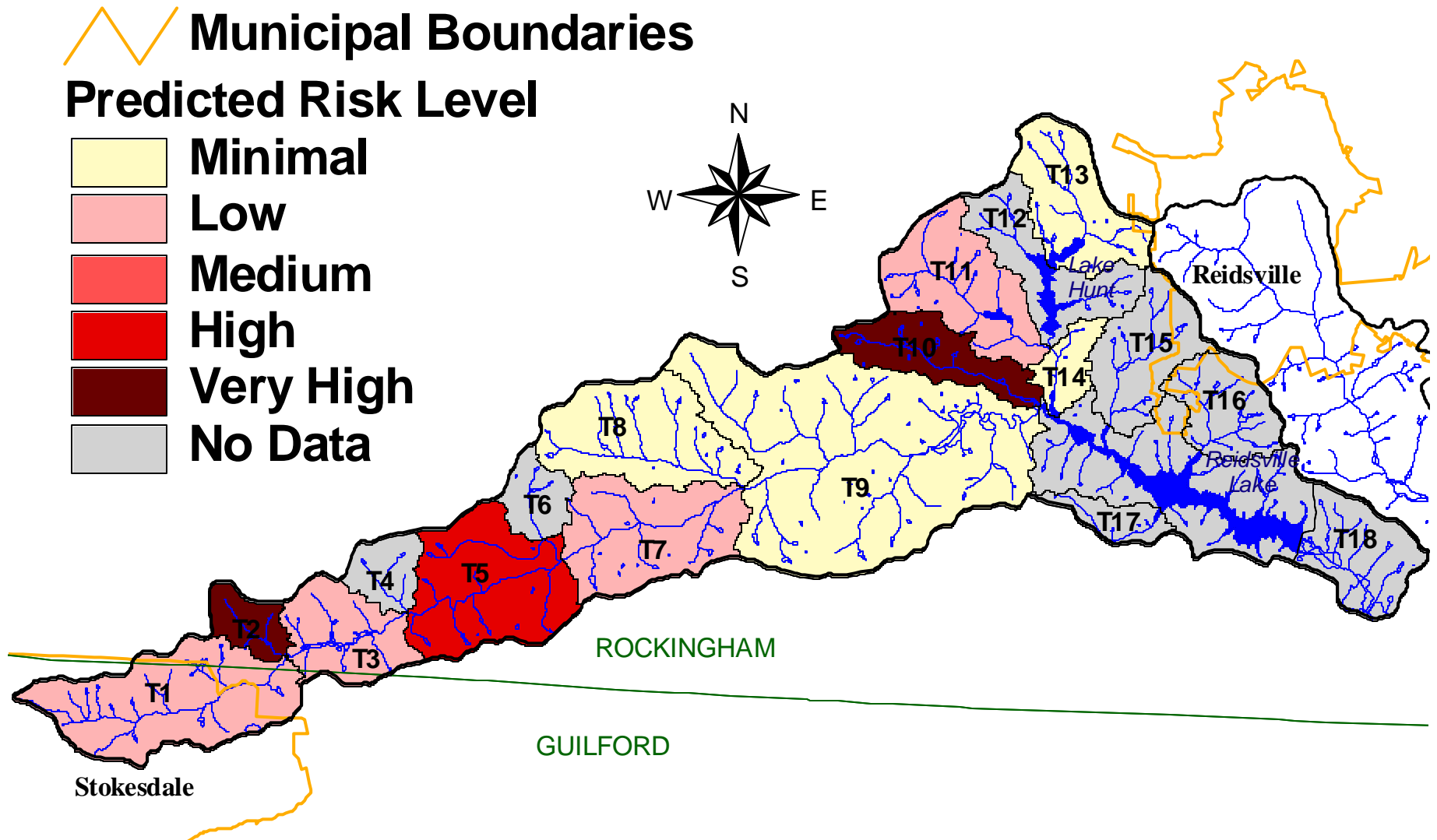
Bank Erosion Hazard Index

- Developed by Rosgen (2001)
 - Bank height, bank angle, root depth, root density, bank material surface protection
 - On site evaluation (subjective but not theoretical)
- Risk Thresholds
 - Numeric score yields hazard rating

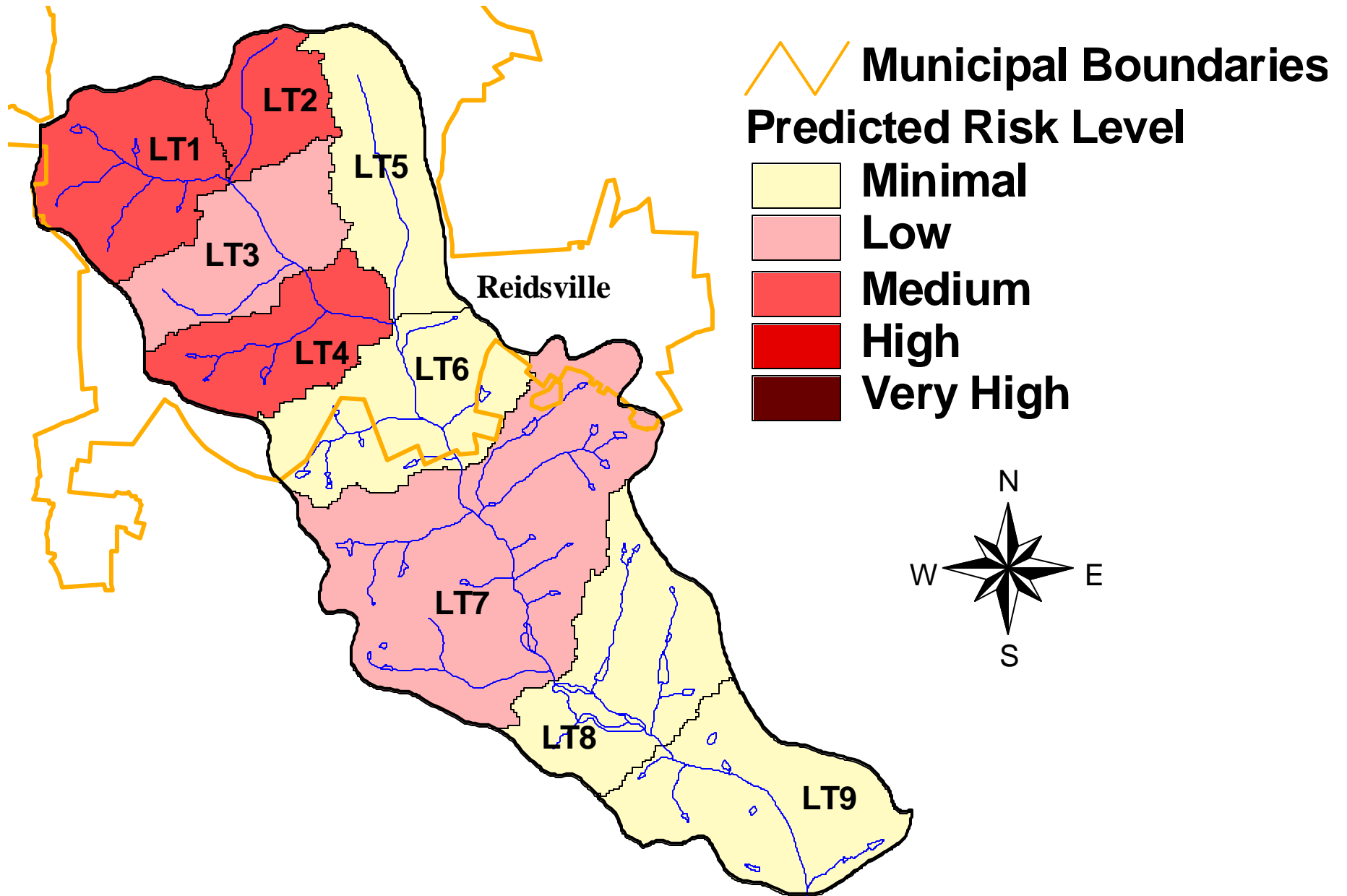
Bank Erosion Hazard Index Scores

Numeric Score	Erosive Potential
5 – 9.5	Very Low
10 – 19.5	Low
20 – 29.5	Moderate
30 – 39.5	High
40 – 45	Very High
46 – 50	Extreme

Existing Conditions - Troublesome



Existing Conditions – L. Troublesome



Upland Sediment Delivery

- Scoping level SWAT model
 - Land cover and soil erosivity
 - Does not reflect management factors
- Risk Thresholds from modeling analysis

Troublesome Creek - Sediment Delivery

