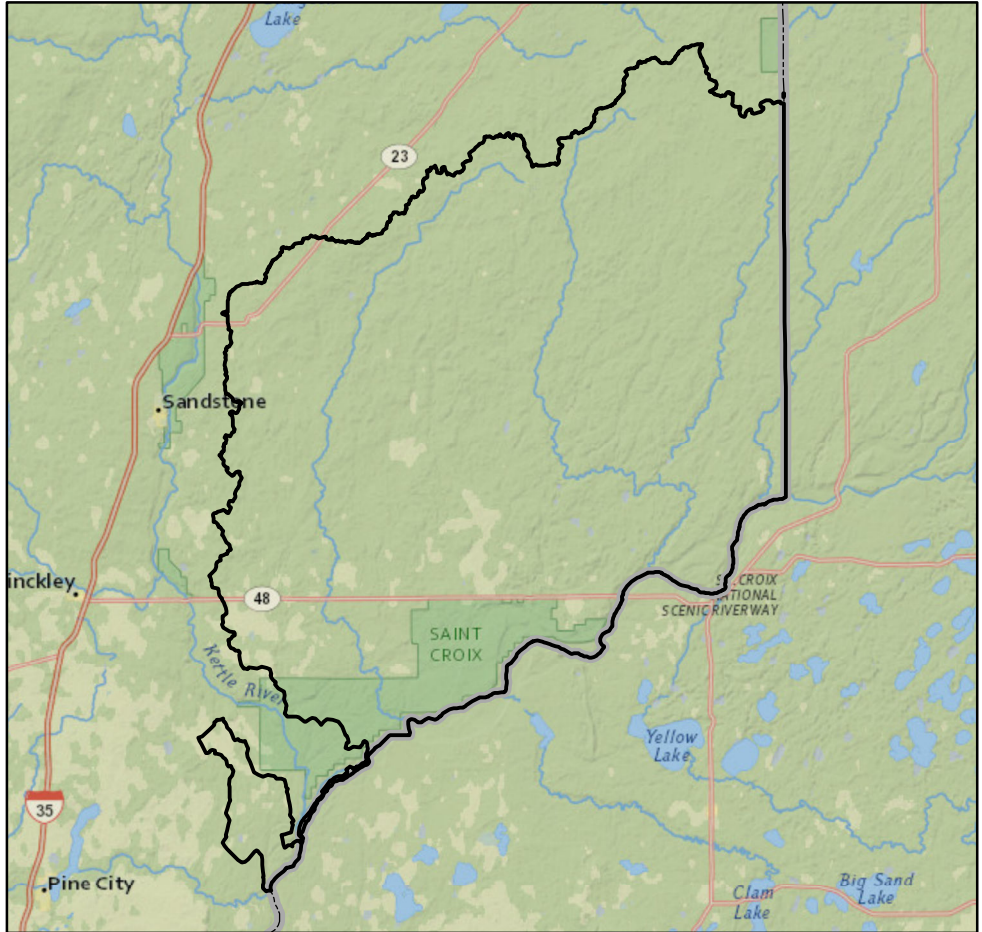




Watershed Report Card: St. Croix R-Upper



People and Places:

Watershed Population:

2000 census - 2,761
 2010 census - 2,920

Largest Cities - Population:

Askov - 364
 Saint Johns Landing Camp - None
 Cloverdale - None
 Markville - None
 Duxbury - None

Counties - % of watershed:

Pine - 100 %

Watershed Area:

Watershed size:

347,720 acres
 543 square miles

Watershed Surface Area:

Percent Land - 99 %
 Percent Water - 1 %

HUC8 ID:

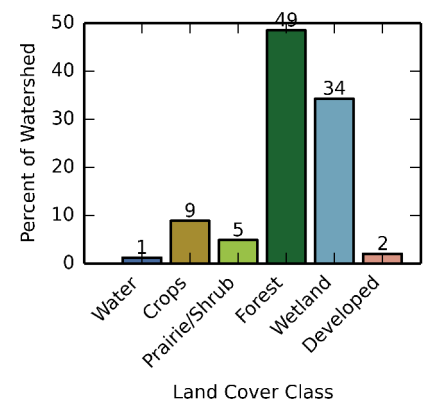
07030001

Basin Name:

St. Croix (0703)

Land Use:

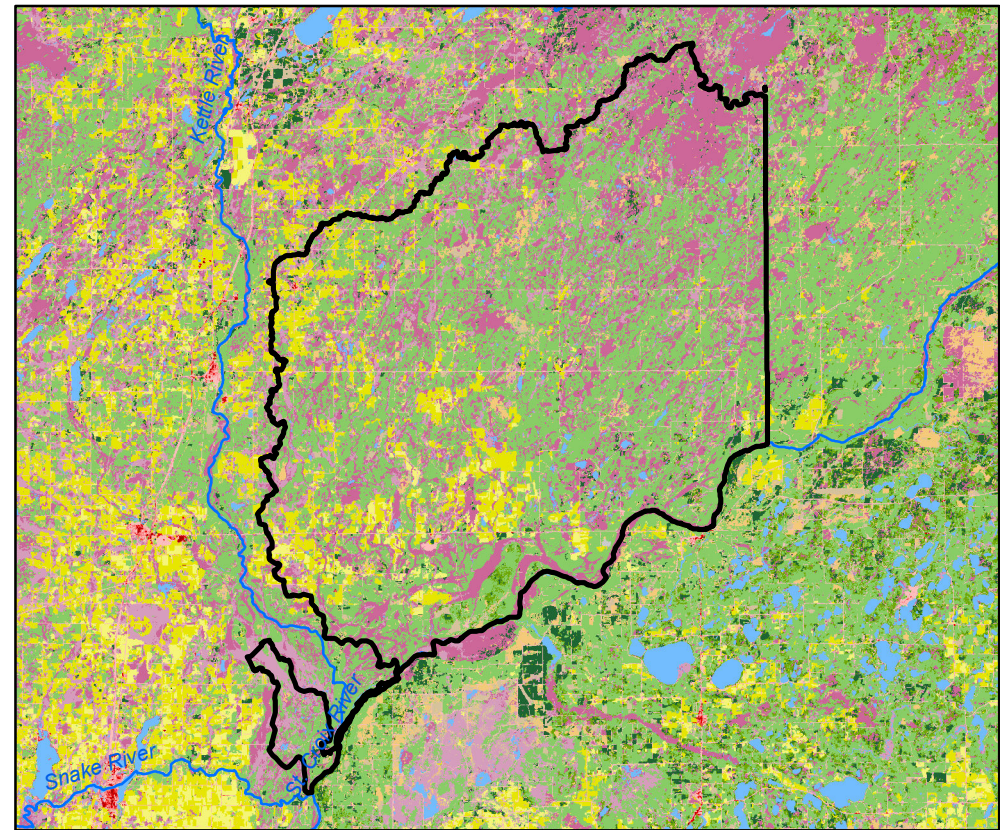
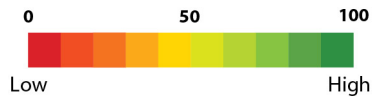
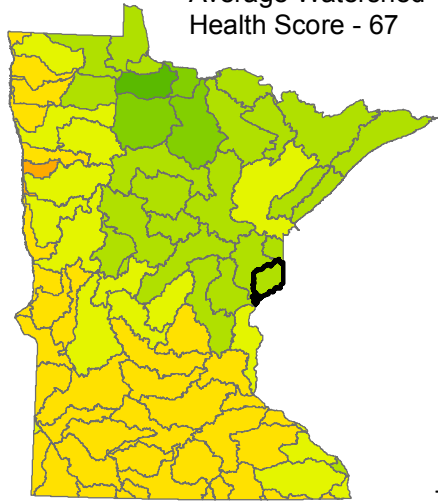
Percent of watershed area by land cover type:



Watershed Health Report - Major Watershed

St. Croix R-Upper

Average Watershed Health Score - 67



These health scores are calculated at the Major Watershed (HUC8) scale. Health score names followed by (*) are also calculated at the DNR Catchment scale (subdivided HUC12). Those results are reported on the following pages.



Hydrology

Component Health Score (index average) 91

Index Scores

Perennial Cover*	96
Impervious Cover*	97
Water Withdrawal*	99
Flow Variability	67
Hydrologic Storage	93
Sub-Scores	
Altered Streams*	86
Surface Storage	100



Geomorphology

Component Health Score (index average) 50

Index Scores

Soil Erosion Potential*	62
Groundwater Susceptibility	58
Climate Vulnerability	29



Biology

Component Health Score (index average) 60

Index Scores

Terrestrial Habitat Quality*	45
Stream Species Quality*	70
Species Richness	71
At-Risk Species Richness	52



Connectivity

Component Health Score (index average) 55

Index Scores

Terrestrial Habitat Connectivity	51
Aquatic Connectivity*	81
Riparian Connectivity*	97



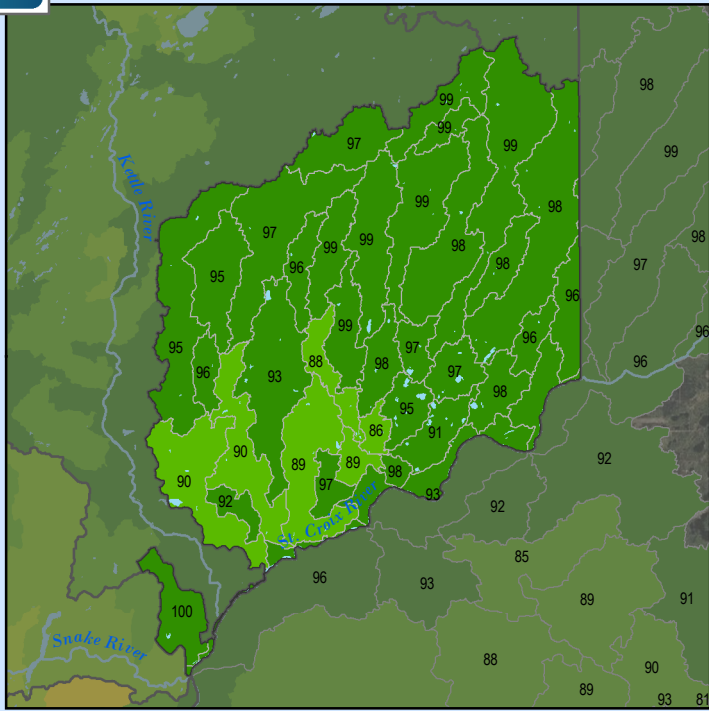
Water Quality

Component Health Score (index average) 81

Index Scores

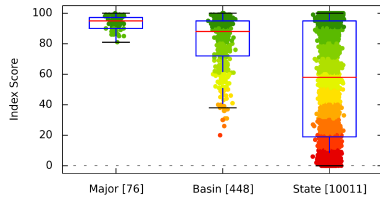
Non-Point Pollution Sources	95
Sub-Score	
Phosphorus Risk*	89
Localized Pollution Sources*	97
Assessments	52

Perennial Cover (2011)

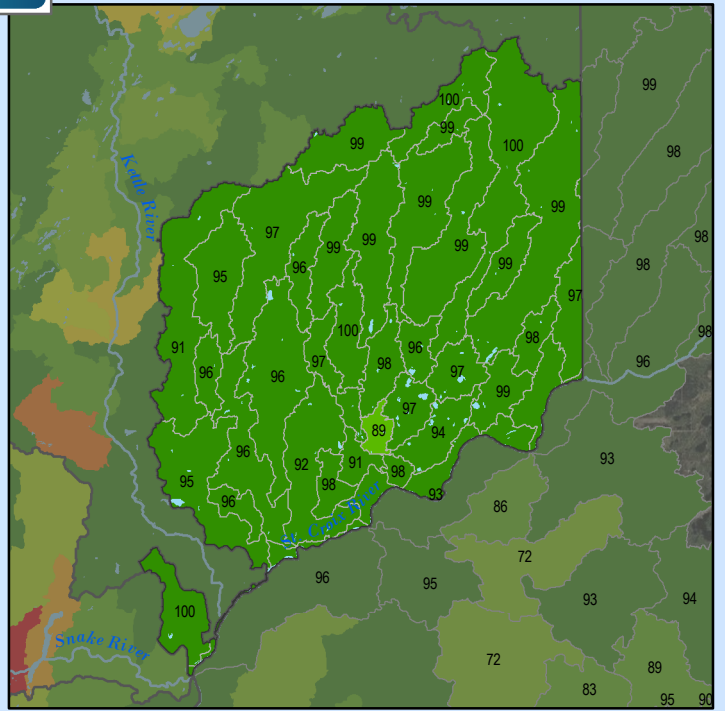


Health Score Distributions:

St. Croix R-Upper
 Min: 81
 Max: 100
 Median: 95.0
 Mean: 93.79
 Standard Dev: 4.33

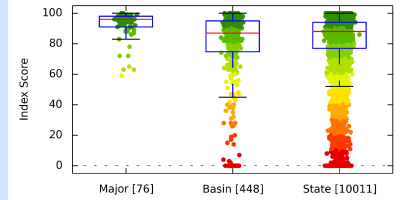


Impervious Cover (2011)

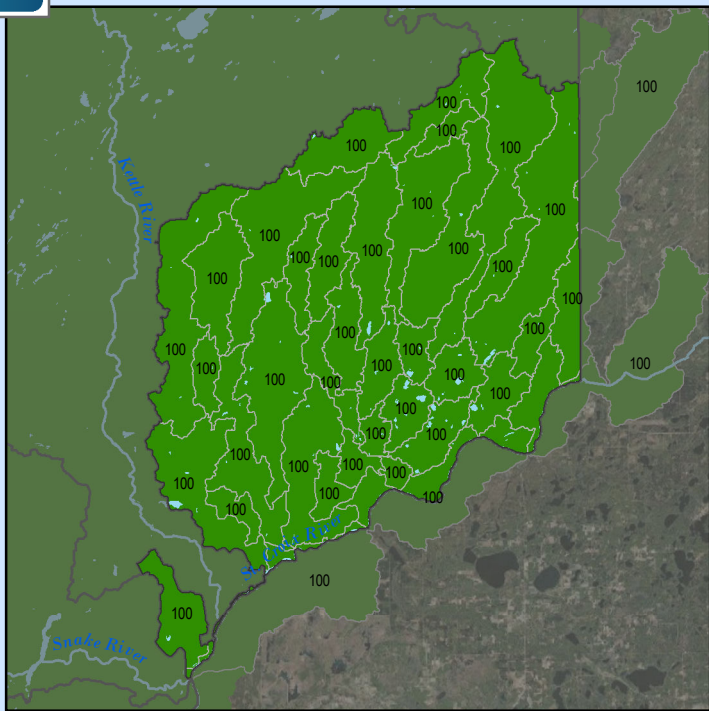


Health Score Distributions:

St. Croix R-Upper
 Min: 59
 Max: 100
 Median: 96.0
 Mean: 92.53
 Standard Dev: 9.05

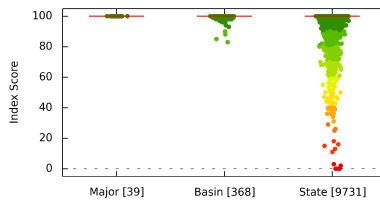


Water Withdrawal Index

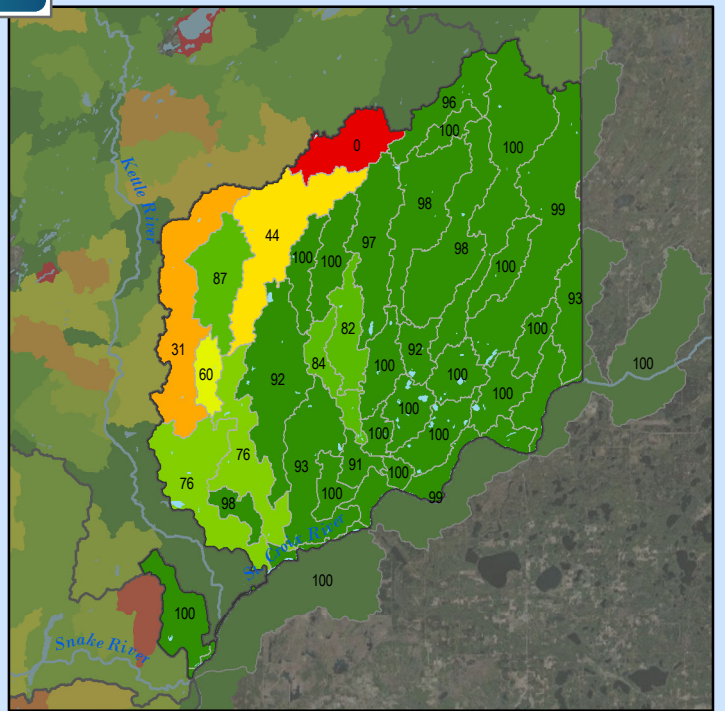


Health Score Distributions:

St. Croix R-Upper
 Min: 100
 Max: 100
 Median: 100.0
 Mean: 100.0
 Standard Dev: 0.0

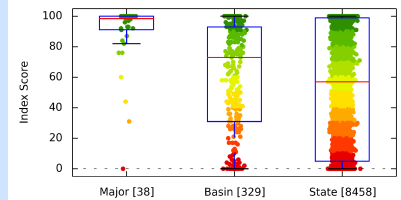


Altered Streams



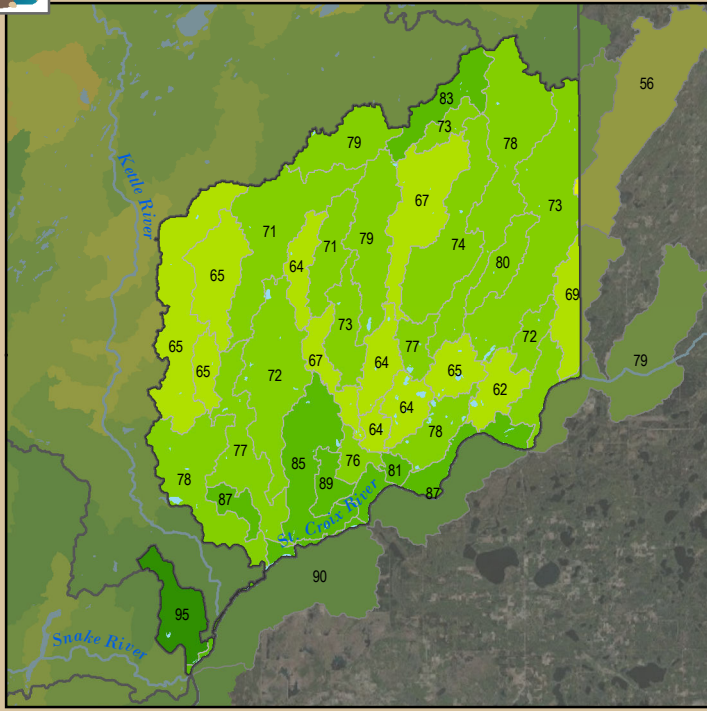
Health Score Distributions:

St. Croix R-Upper
 Min: 0
 Max: 100
 Median: 98.5
 Mean: 89.11
 Standard Dev: 21.3



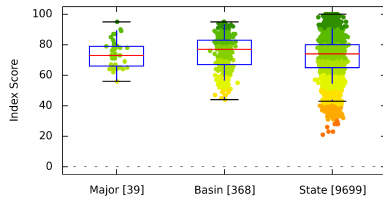


Soil Erosion Potential

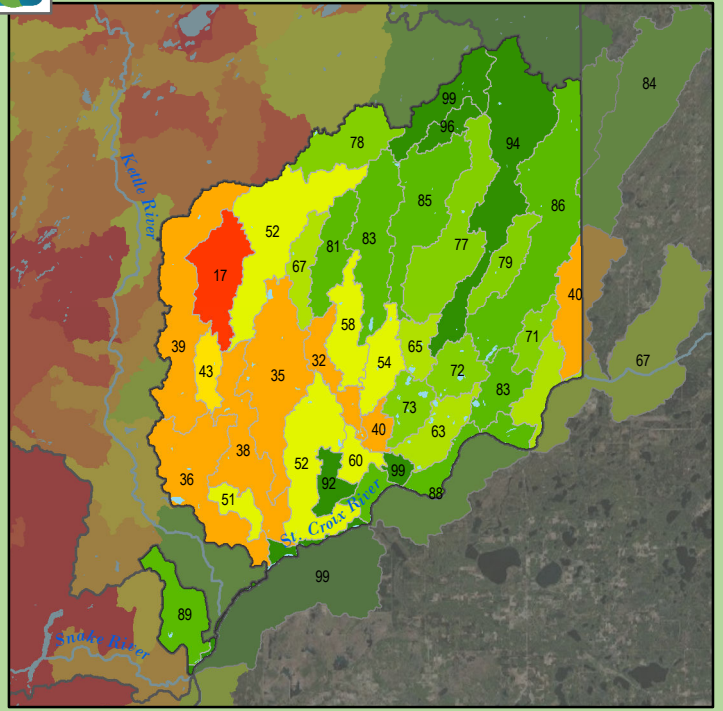


Health Score Distributions:

St. Croix R-Upper
 Min: 56
 Max: 95
 Median: 73.0
 Mean: 74.21
 Standard Dev: 8.82

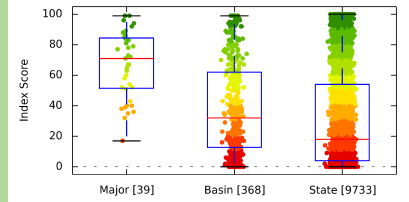


Terrestrial Habitat Quality

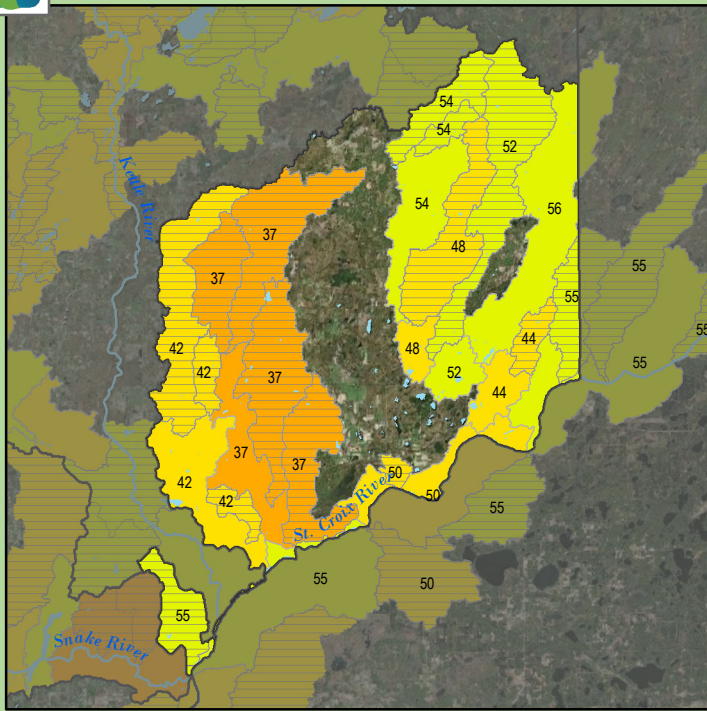


Health Score Distributions:

St. Croix R-Upper
 Min: 17
 Max: 99
 Median: 71.0
 Mean: 67.1
 Standard Dev: 21.9

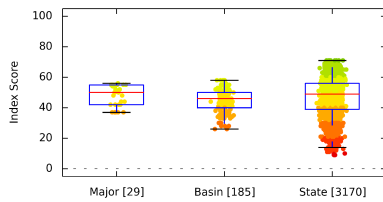


Stream Species Quality - Mussel Score

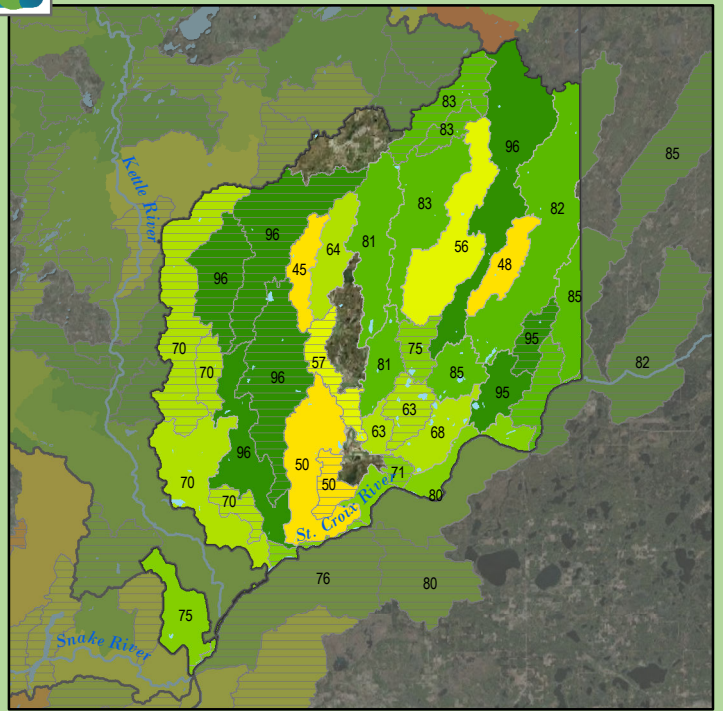


Health Score Distributions:

St. Croix R-Upper
 Min: 37
 Max: 56
 Median: 50.0
 Mean: 48.07
 Standard Dev: 6.8

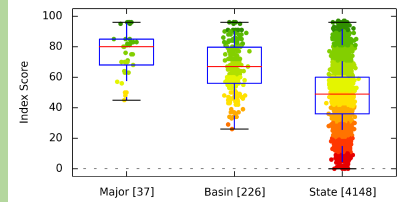


Stream Species Quality - Aquatic Invertebrate IBI



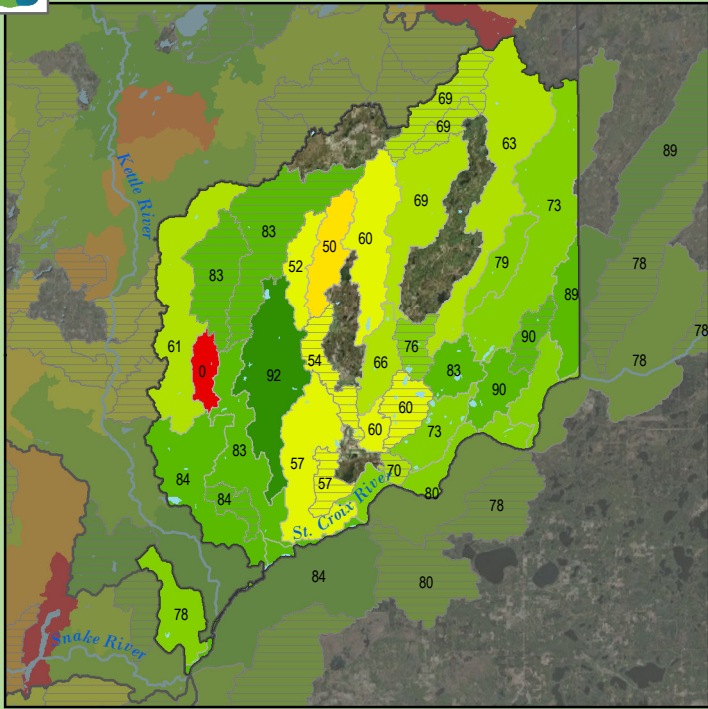
Health Score Distributions:

St. Croix R-Upper
 Min: 45
 Max: 96
 Median: 80.0
 Mean: 75.7
 Standard Dev: 14.55



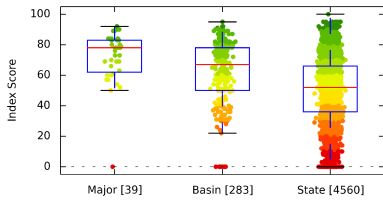


Stream Species Quality - Fish IBI

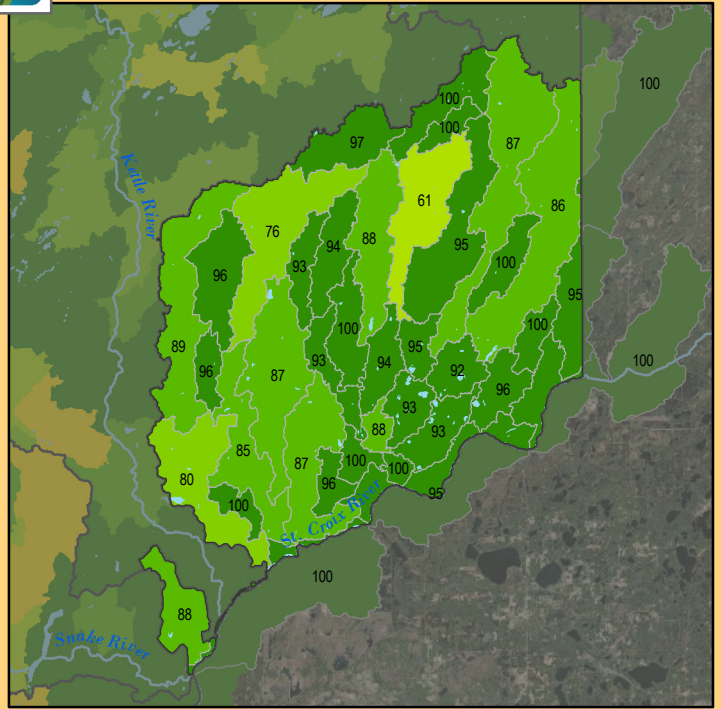


Health Score Distributions:

St. Croix R-Upper
Min: 0
Max: 92
Median: 78.0
Mean: 71.85
Standard Dev: 16.38

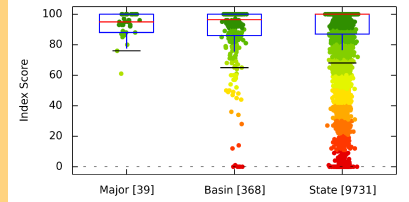


Aquatic Connectivity

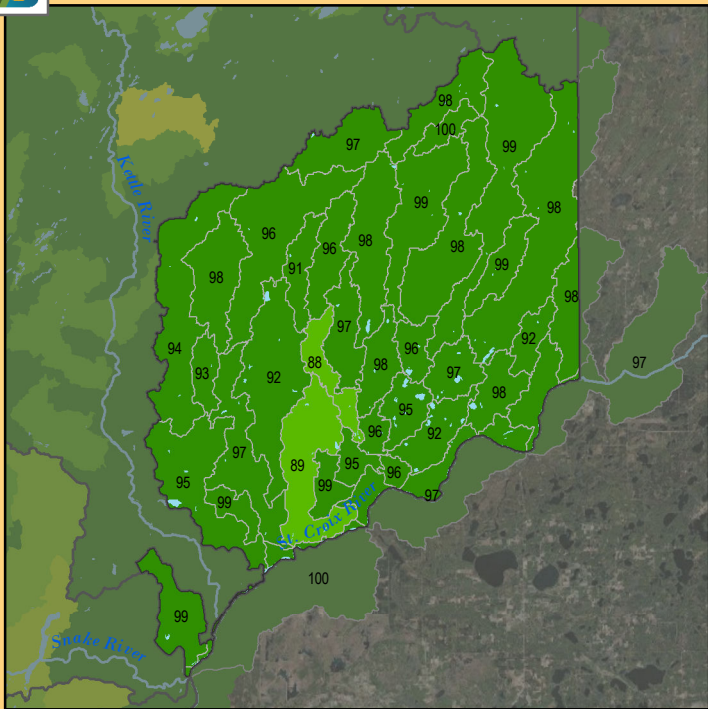


Health Score Distributions:

St. Croix R-Upper
Min: 61
Max: 100
Median: 95.0
Mean: 92.69
Standard Dev: 7.85

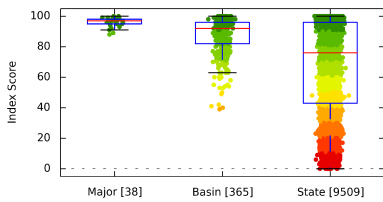


Riparian Connectivity

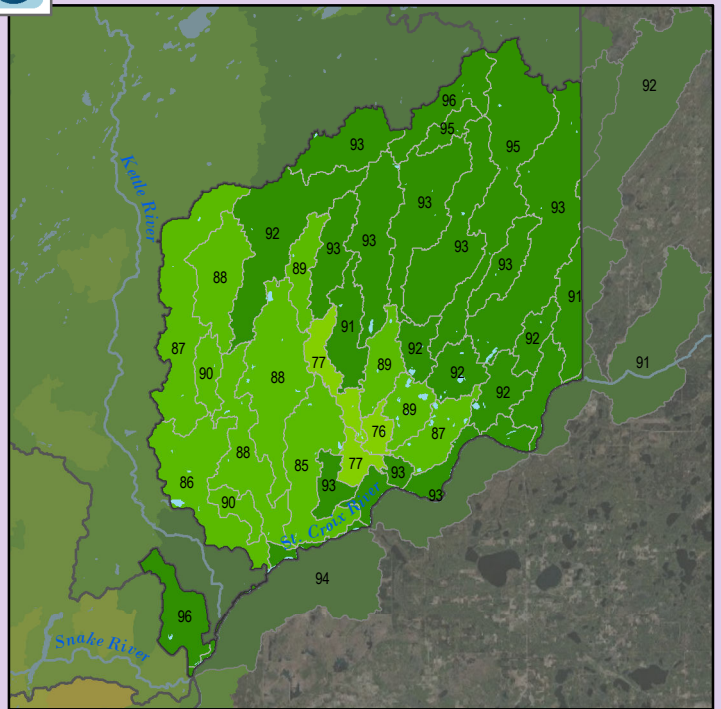


Health Score Distributions:

St. Croix R-Upper
Min: 88
Max: 100
Median: 97.0
Mean: 96.21
Standard Dev: 2.92

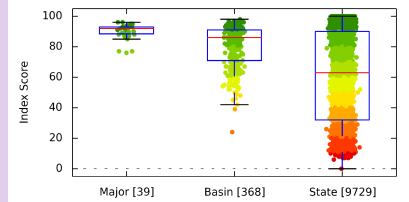


Non-Point Source - Phosphorus Risk



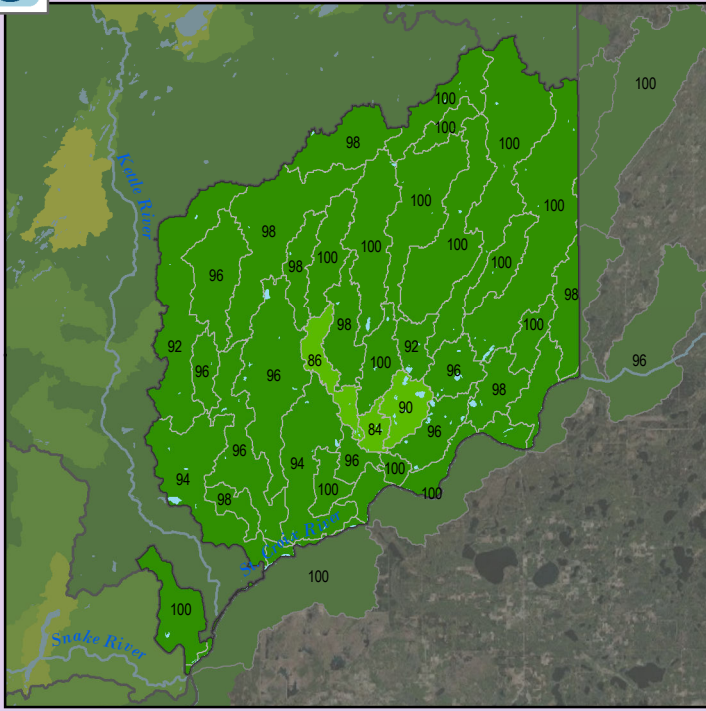
Health Score Distributions:

St. Croix R-Upper
Min: 76
Max: 96
Median: 92.0
Mean: 90.18
Standard Dev: 4.7



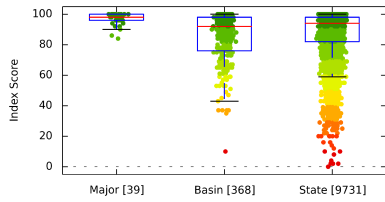


Localized Pollution Sources

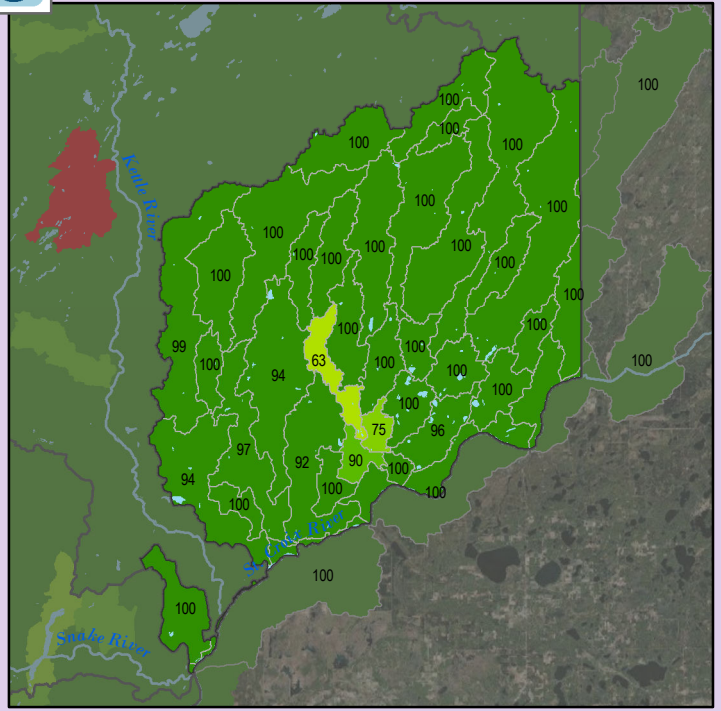


Health Score Distributions:

St. Croix R-Upper
 Min: 84
 Max: 100
 Median: 98.0
 Mean: 97.08
 Standard Dev: 3.84

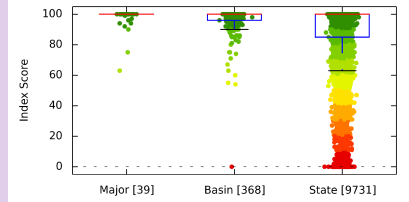


Localized Pollution Sources - Animal Units

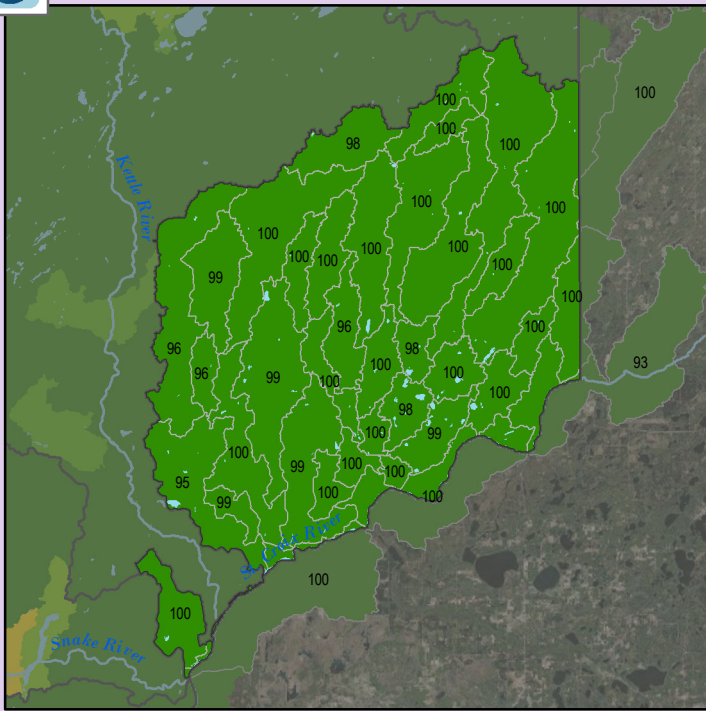


Health Score Distributions:

St. Croix R-Upper
 Min: 63
 Max: 100
 Median: 100.0
 Mean: 97.44
 Standard Dev: 7.16

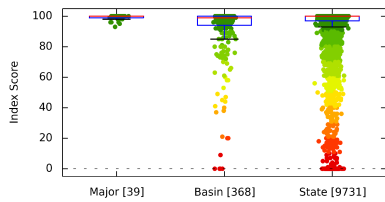


Localized Pollution Sources - Potential Contaminants

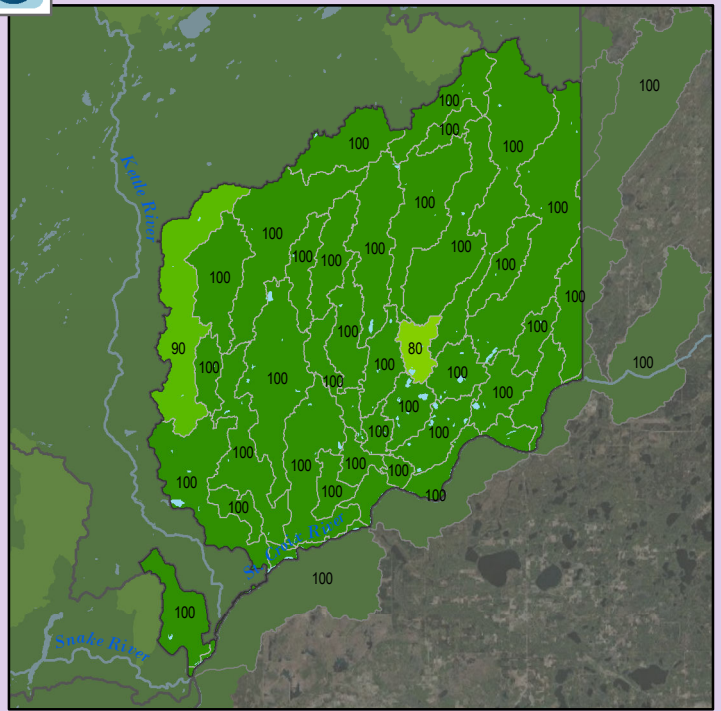


Health Score Distributions:

St. Croix R-Upper
 Min: 93
 Max: 100
 Median: 100.0
 Mean: 99.1
 Standard Dev: 1.66

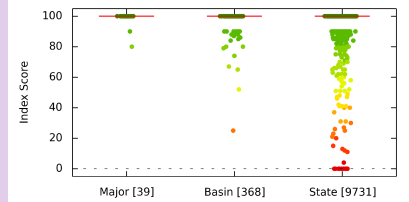


Localized Pollution Sources - Superfund Sites



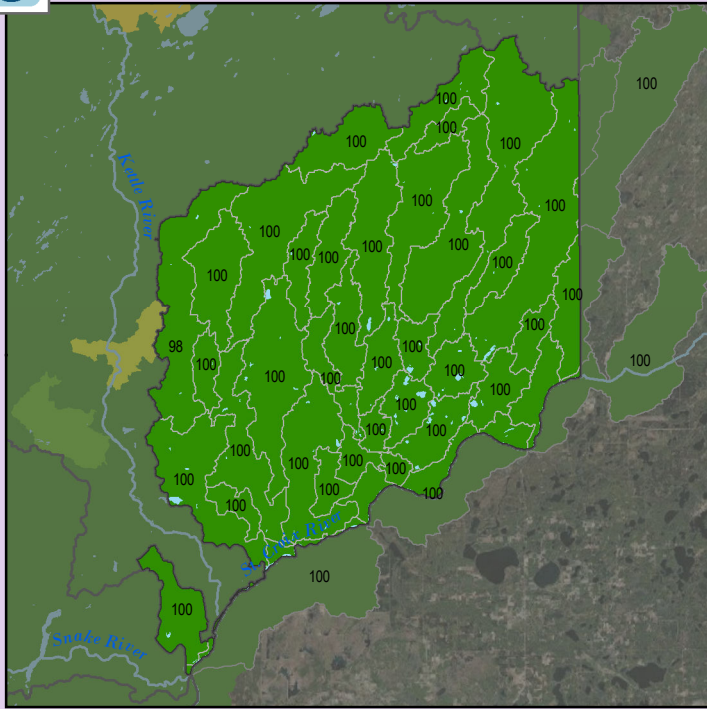
Health Score Distributions:

St. Croix R-Upper
 Min: 80
 Max: 100
 Median: 100.0
 Mean: 99.23
 Standard Dev: 3.5



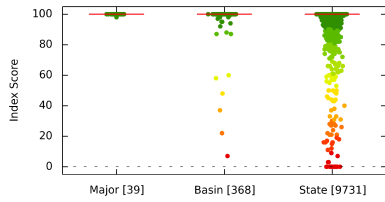


Localized Pollution Sources - Wastewater Treatment

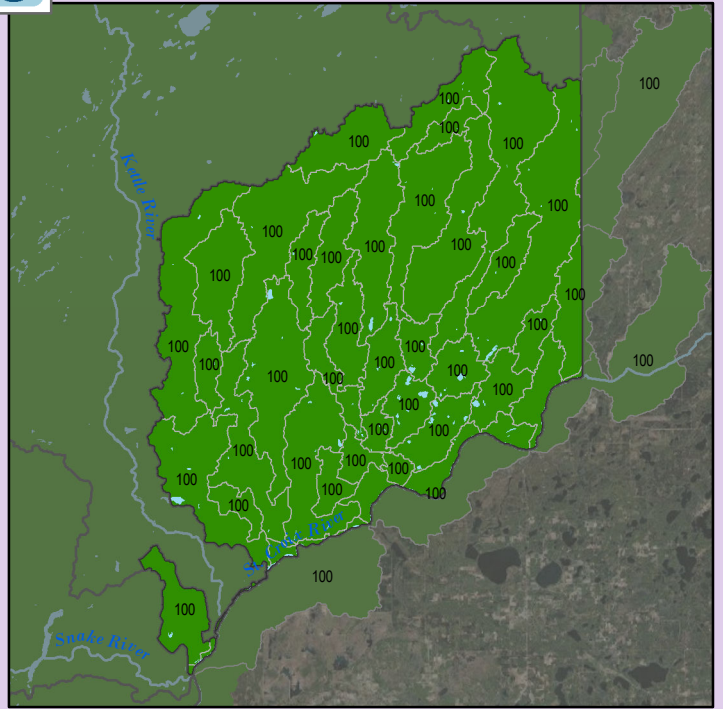


Health Score Distributions:

St. Croix R-Upper
 Min: 98
 Max: 100
 Median: 100.0
 Mean: 99.95
 Standard Dev: 0.32

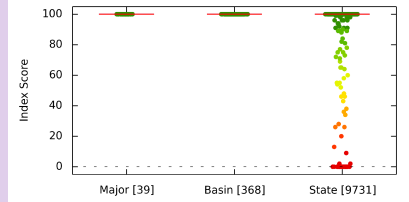


Localized Pollution Sources - Open Pit Mines

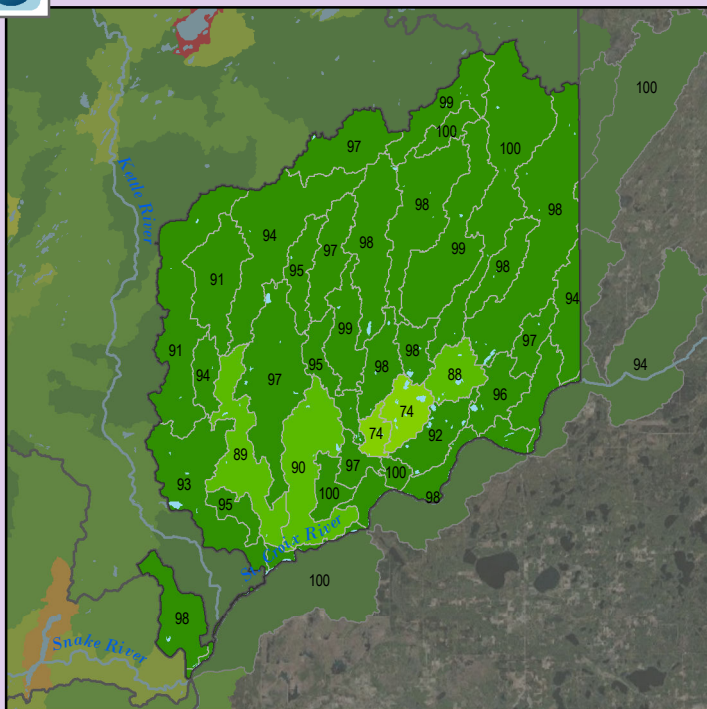


Health Score Distributions:

St. Croix R-Upper
 Min: 100
 Max: 100
 Median: 100.0
 Mean: 100.0
 Standard Dev: 0.0



Localized Pollution Sources - Septic Systems



Health Score Distributions:

St. Croix R-Upper
 Min: 74
 Max: 100
 Median: 97.0
 Mean: 95.0
 Standard Dev: 5.84

