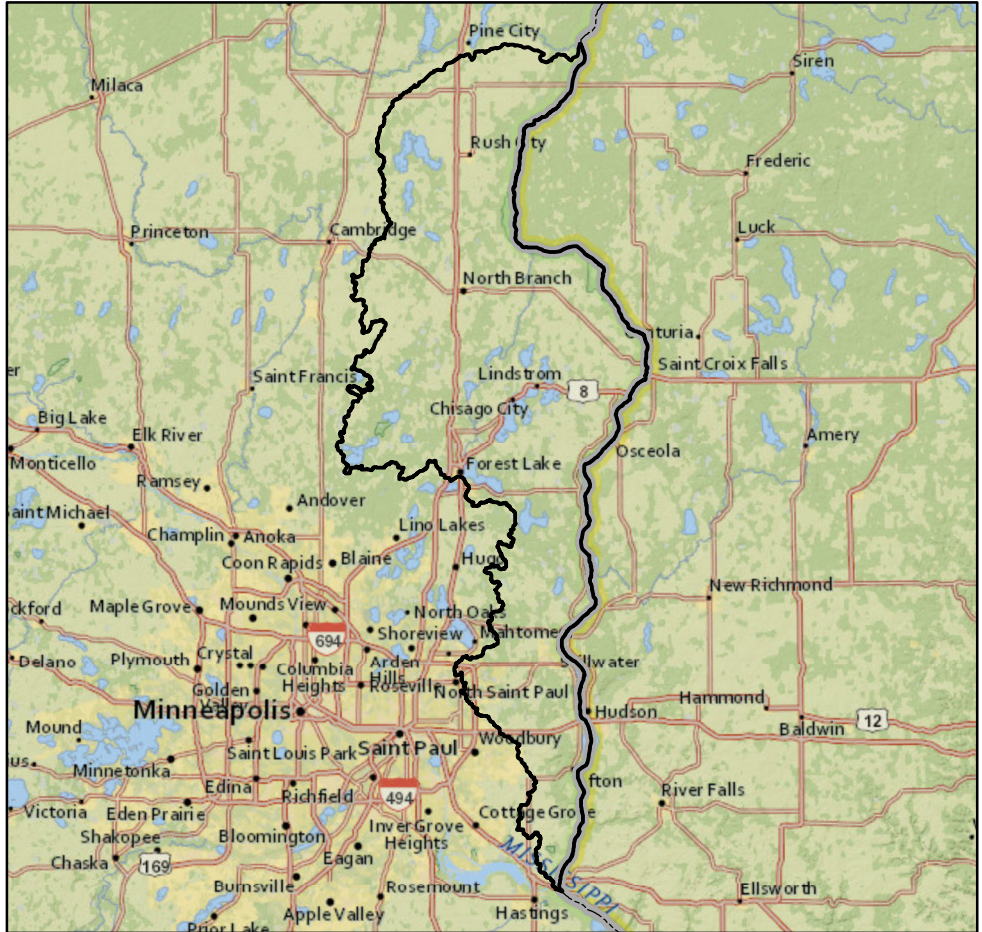




Watershed Report Card: **St. Croix R-Stillwtr**



People and Places:

Watershed Population:

2000 census - 137,033
 2010 census - 158,712

Largest Cities - Population:

Forest Lake - 18,375
 Stillwater - 18,225
 East Bethel - 11,626
 North Branch - 10,125
 Lake Elmo - 8,069

Counties - % of watershed:

Chisago - 47 %
 Washington - 29 %
 Pine - 9 %
 Anoka - 8 %
 Isanti - 7 %
 Ramsey - 0 %

Watershed Area:

Watershed size:
 585,737 acres
 915 square miles

Watershed Surface Area:

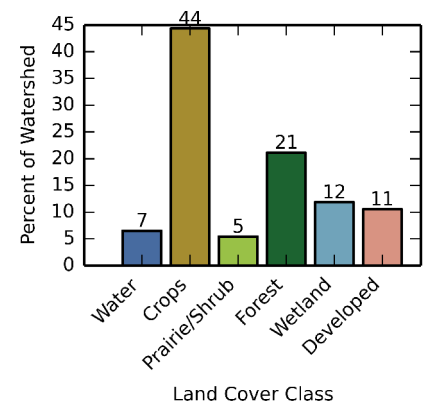
Percent Land - 93 %
 Percent Water - 7 %

HUC8 ID:
 07030005

Basin Name:
 St. Croix (0703)

Land Use:

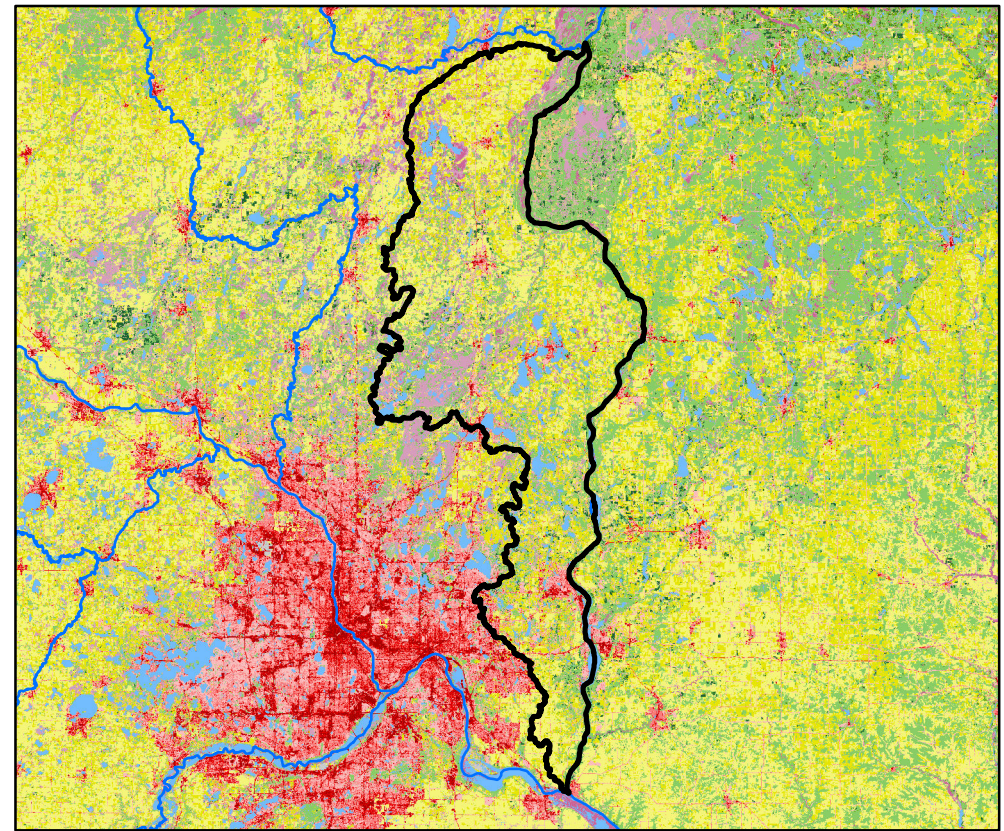
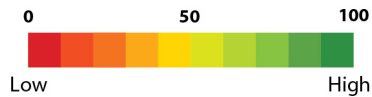
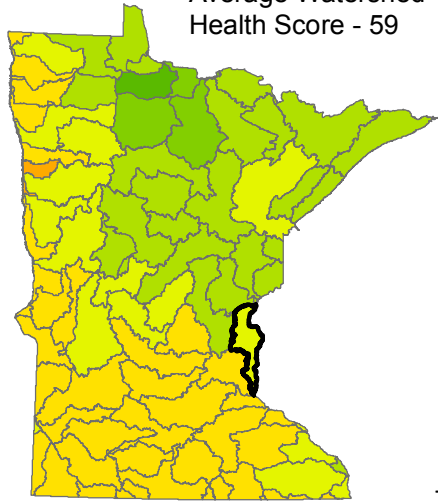
Percent of watershed area by land cover type:



Watershed Health Report - Major Watershed

St. Croix R-Stillwtr

Average Watershed Health Score - 59



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) 75

Index Scores

Perennial Cover*	64
Impervious Cover*	38
Water Withdrawal*	99
Flow Variability	66
Hydrologic Storage	76
Sub-Scores	
Altered Streams*	62
Surface Storage	90



Geomorphology

Component Health Score (index average) 60

Index Scores

Soil Erosion Potential*	72
Groundwater Susceptibility	29
Climate Vulnerability	78



Biology

Component Health Score (index average) 57

Index Scores

Terrestrial Habitat Quality*	16
Stream Species Quality*	76
Species Richness	77
At-Risk Species Richness	59



Connectivity

Component Health Score (index average) 39

Index Scores

Terrestrial Habitat Connectivity	19
Aquatic Connectivity*	68
Riparian Connectivity*	84



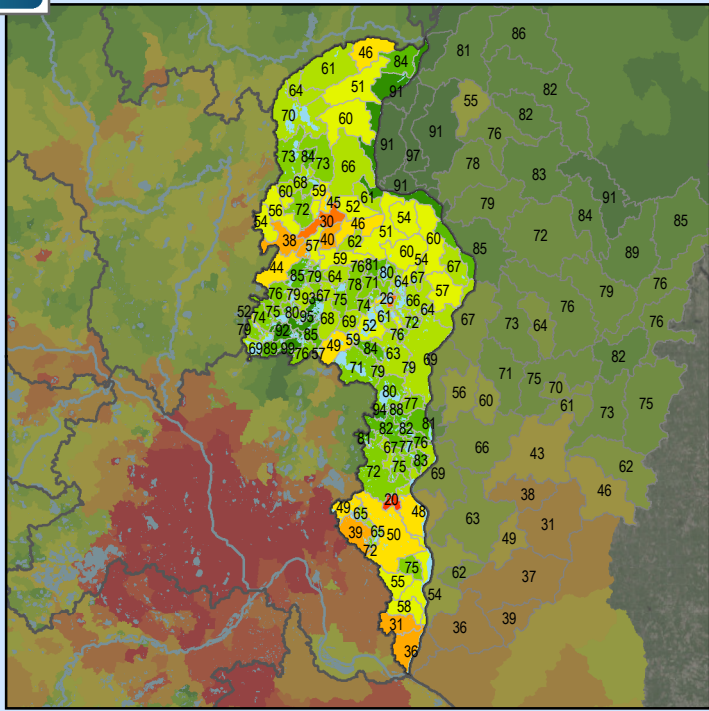
Water Quality

Component Health Score (index average) 62

Index Scores

Non-Point Pollution Sources	49
Sub-Score	
Phosphorus Risk*	59
Localized Pollution Sources*	74
Assessments	50

Perennial Cover (2011)



Health Score Distributions:

St. Croix R-Stillwtr

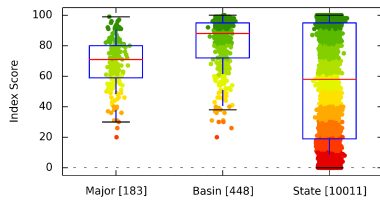
Min: 20

Max: 99

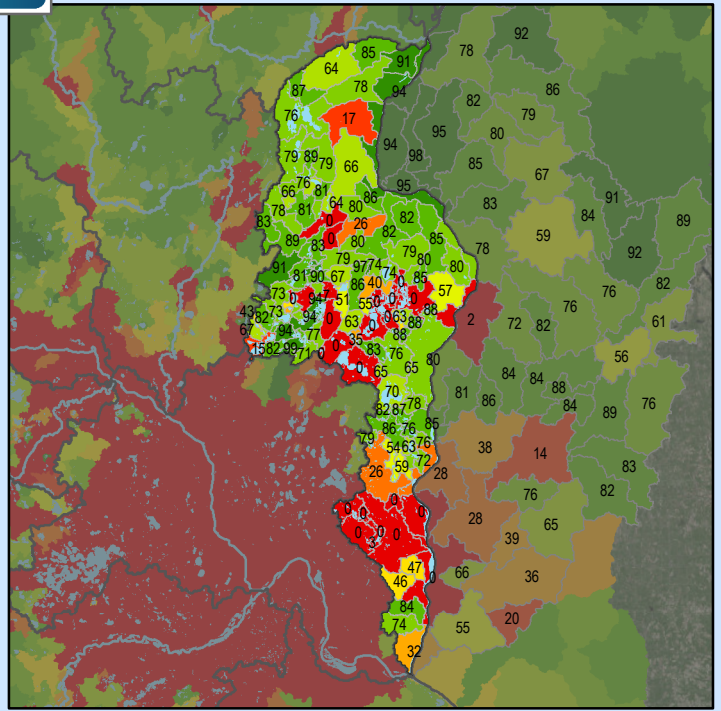
Median: 71.0

Mean: 68.41

Standard Dev: 16.21



Impervious Cover (2011)



Health Score Distributions:

St. Croix R-Stillwtr

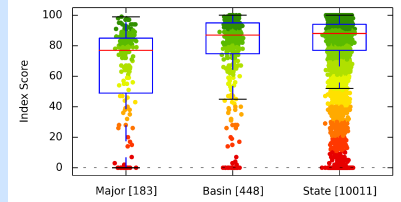
Min: 0

Max: 99

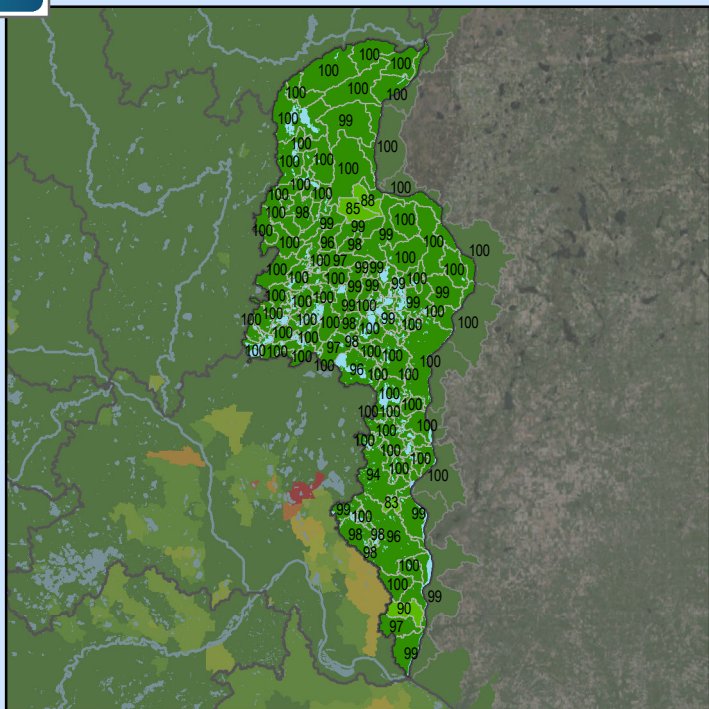
Median: 77.0

Mean: 63.45

Standard Dev: 31.03



Water Withdrawal Index



Health Score Distributions:

St. Croix R-Stillwtr

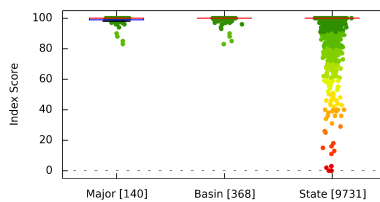
Min: 83

Max: 100

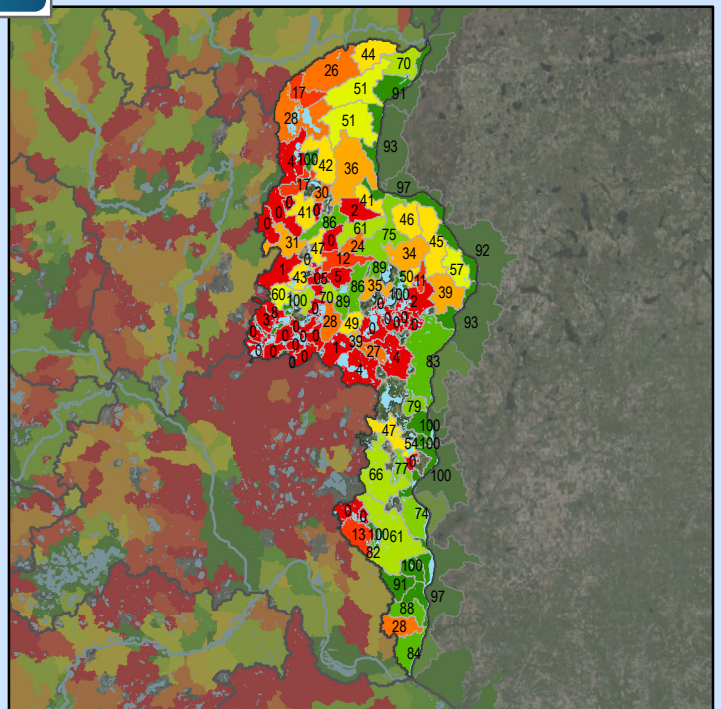
Median: 100.0

Mean: 99.18

Standard Dev: 2.42



Altered Streams



Health Score Distributions:

St. Croix R-Stillwtr

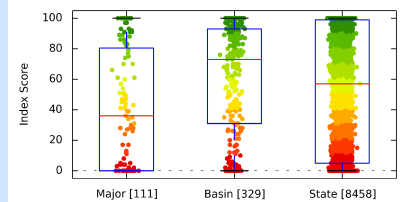
Min: 0

Max: 100

Median: 36.0

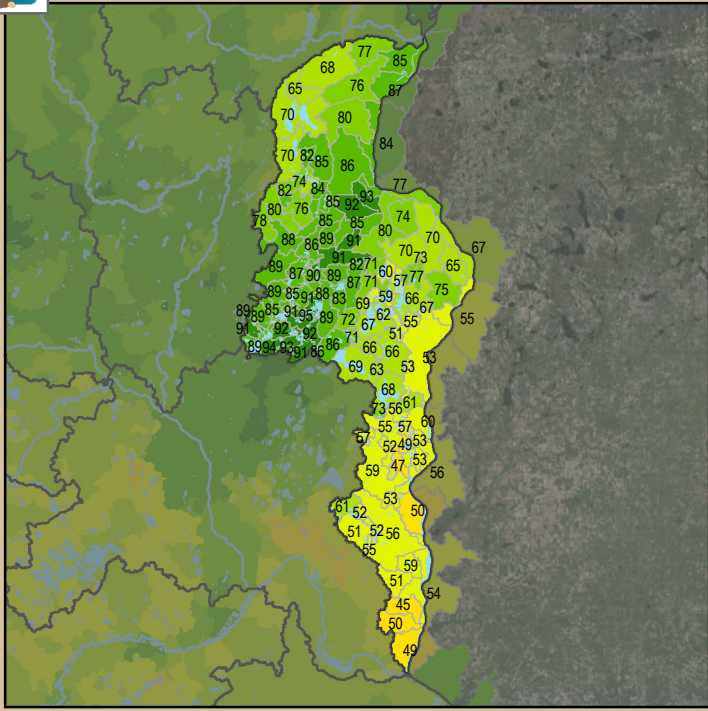
Mean: 40.96

Standard Dev: 37.79



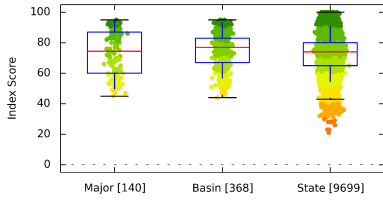


Soil Erosion Potential

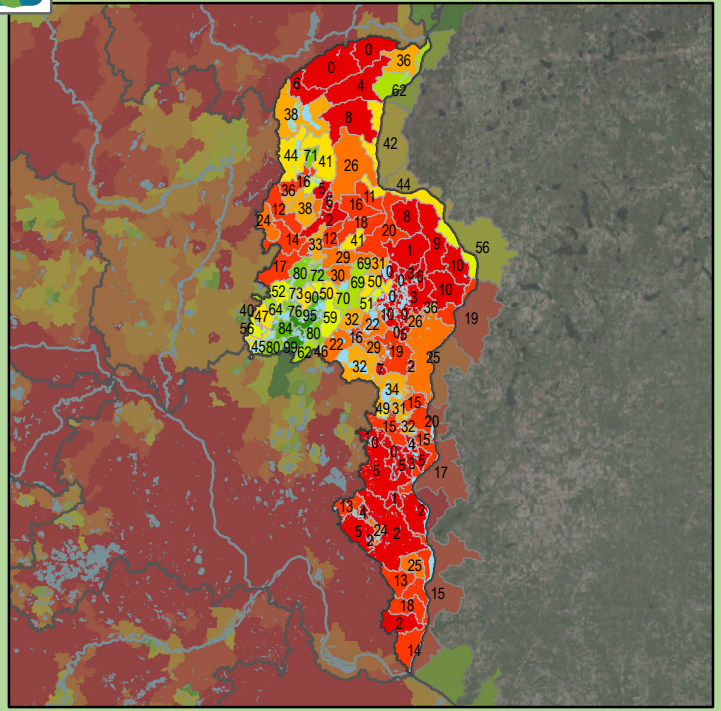


Health Score Distributions:

St. Croix R-Stillwtr
 Min: 45
 Max: 95
 Median: 74.5
 Mean: 73.52
 Standard Dev: 14.73

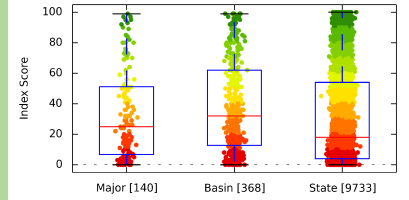


Terrestrial Habitat Quality

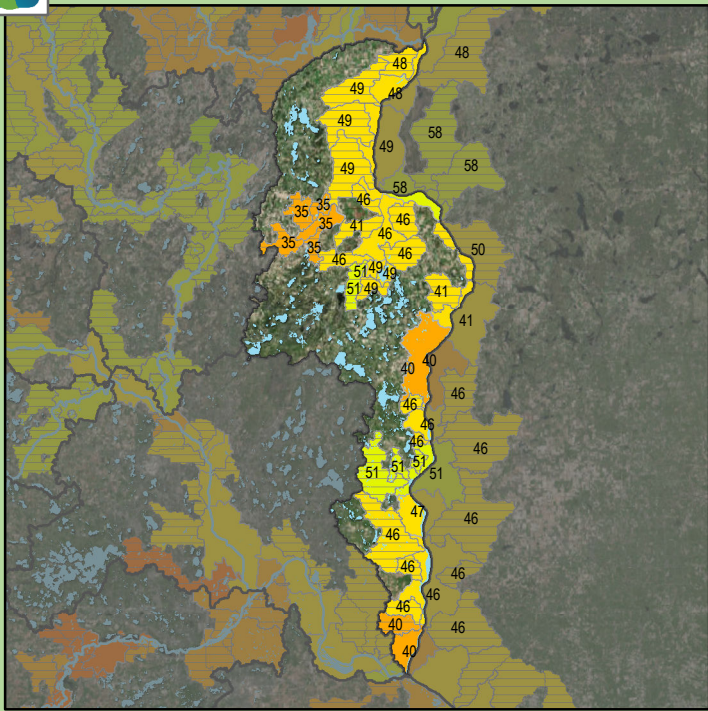


Health Score Distributions:

St. Croix R-Stillwtr
 Min: 0
 Max: 99
 Median: 25.0
 Mean: 32.86
 Standard Dev: 29.01

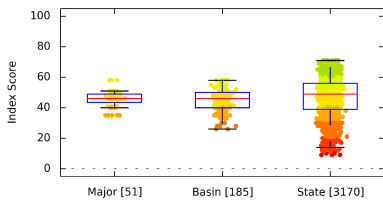


Stream Species Quality - Mussel Score

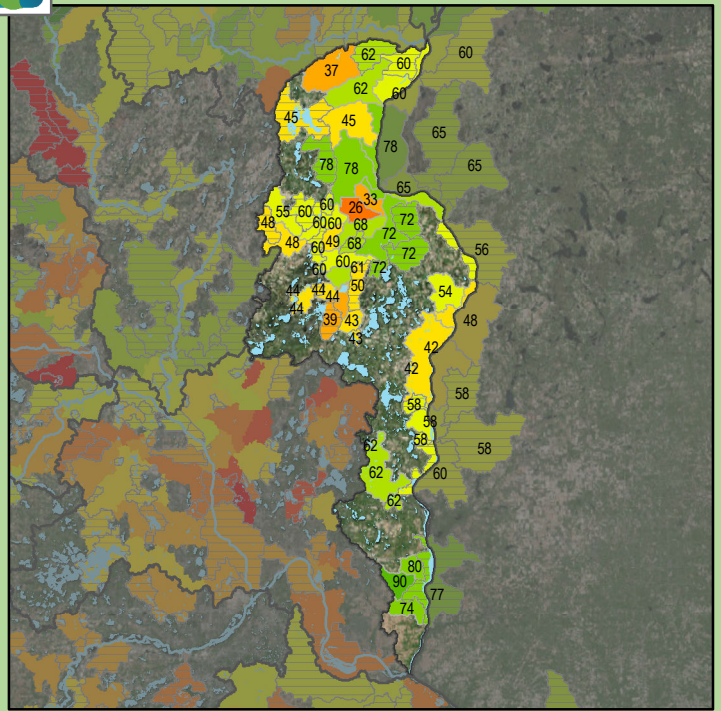


Health Score Distributions:

St. Croix R-Stillwtr
 Min: 35
 Max: 58
 Median: 46.0
 Mean: 45.86
 Standard Dev: 5.63

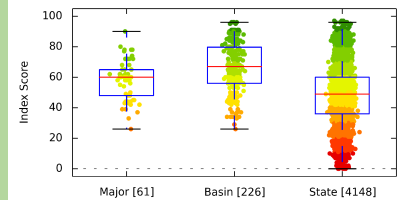


Stream Species Quality - Aquatic Invertebrate IBI

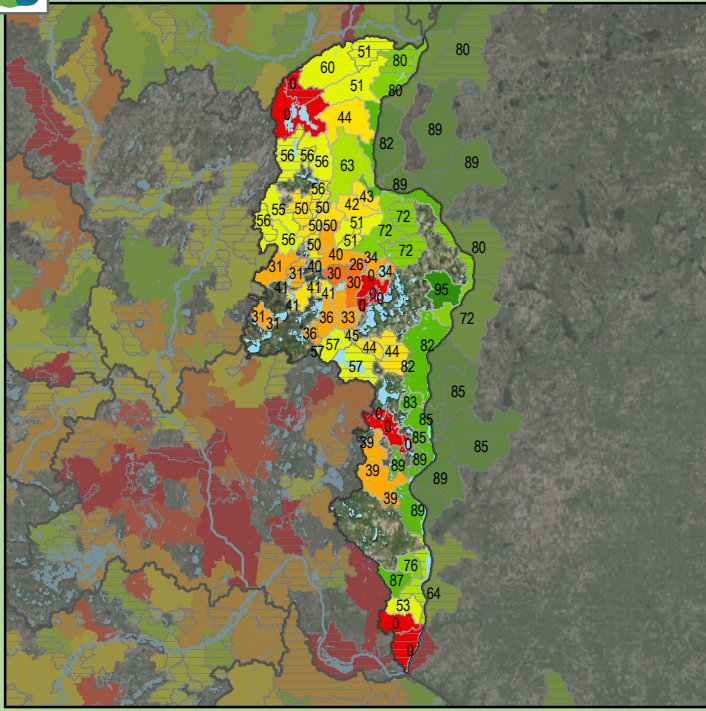


Health Score Distributions:

St. Croix R-Stillwtr
 Min: 26
 Max: 90
 Median: 60.0
 Mean: 57.59
 Standard Dev: 12.77

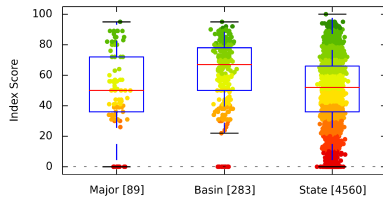


Stream Species Quality - Fish IBI

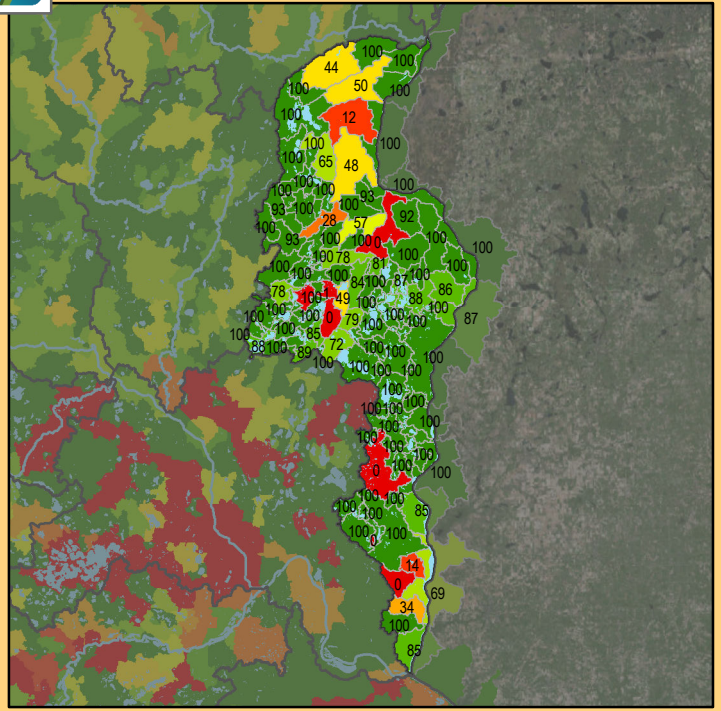


Health Score Distributions:

St. Croix R-Stillwtr
 Min: 0
 Max: 95
 Median: 50.0
 Mean: 50.48
 Standard Dev: 26.64

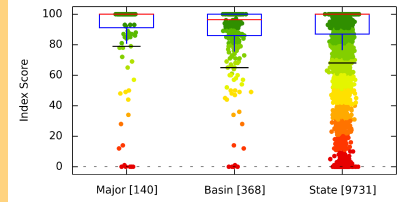


Aquatic Connectivity

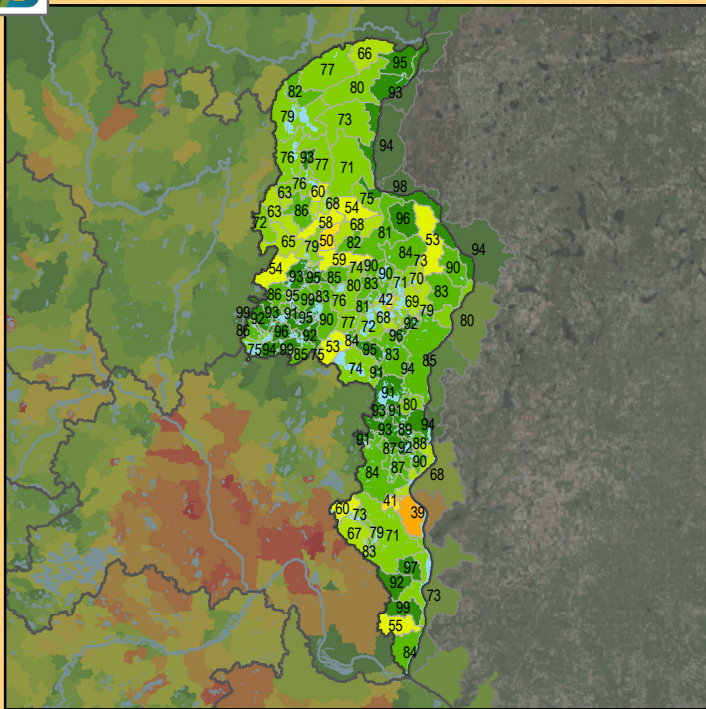


Health Score Distributions:

St. Croix R-Stillwtr
 Min: 0
 Max: 100
 Median: 100.0
 Mean: 88.96
 Standard Dev: 25.01

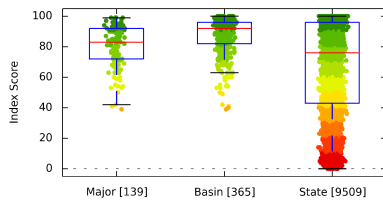


Riparian Connectivity

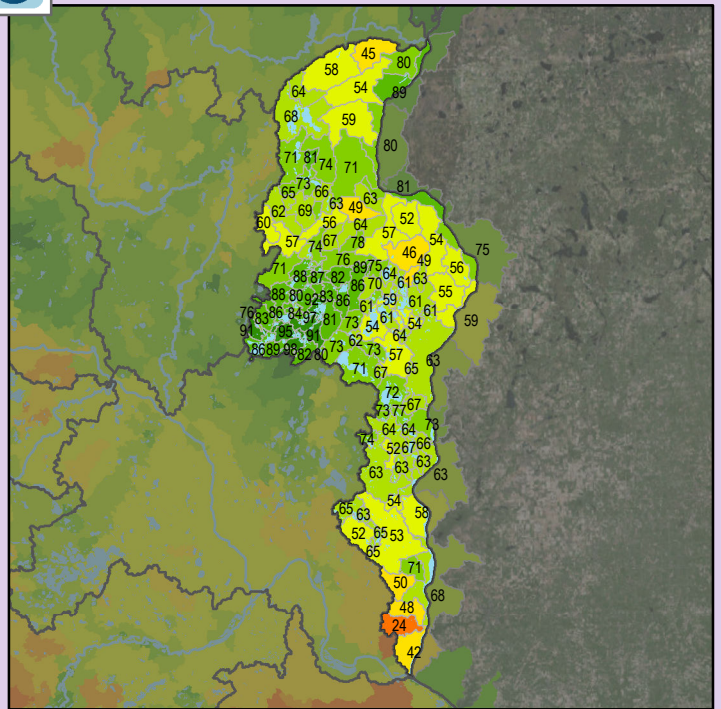


Health Score Distributions:

St. Croix R-Stillwtr
 Min: 39
 Max: 99
 Median: 83.0
 Mean: 80.59
 Standard Dev: 13.54

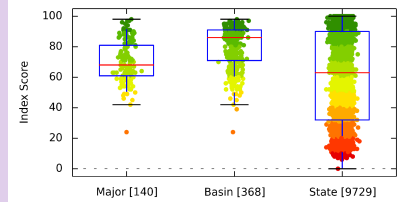


Non-Point Source - Phosphorus Risk



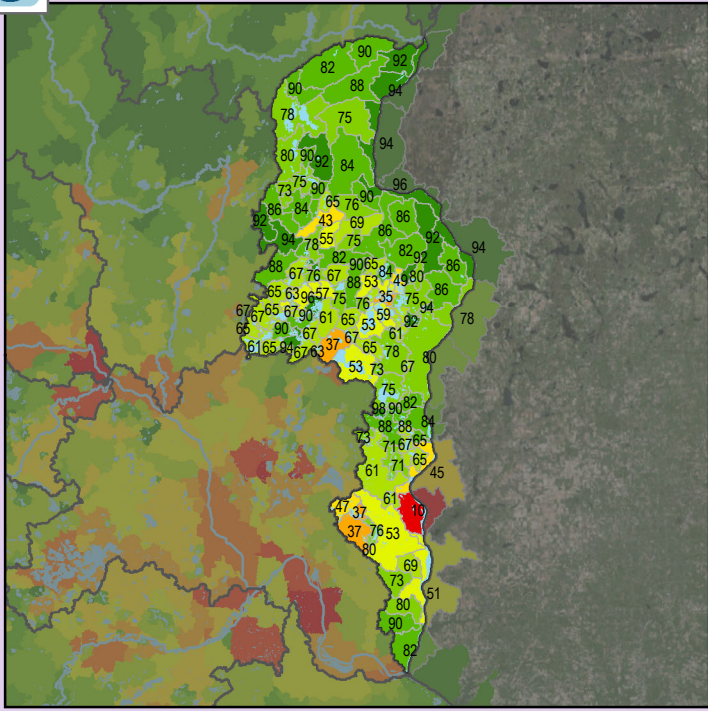
Health Score Distributions:

St. Croix R-Stillwtr
 Min: 24
 Max: 98
 Median: 68.0
 Mean: 70.1
 Standard Dev: 13.73



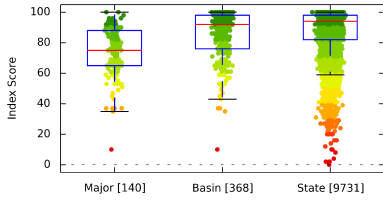


Localized Pollution Sources

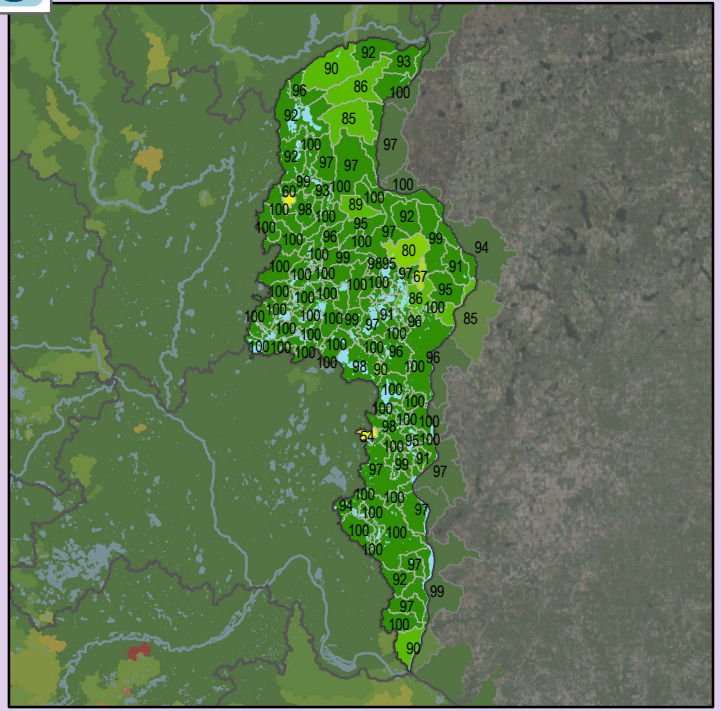


Health Score Distributions:

St. Croix R-Stillwtr
 Min: 10
 Max: 100
 Median: 75.0
 Mean: 73.92
 Standard Dev: 16.02

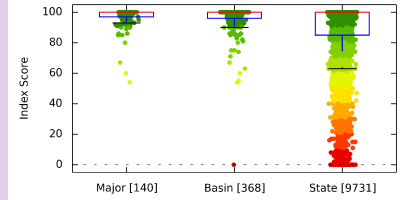


Localized Pollution Sources - Animal Units

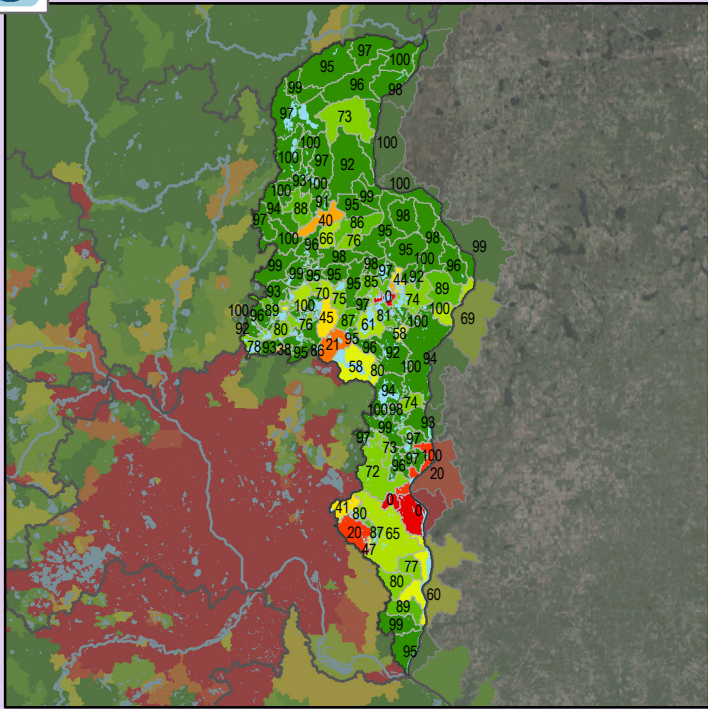


Health Score Distributions:

St. Croix R-Stillwtr
 Min: 54
 Max: 100
 Median: 100.0
 Mean: 96.95
 Standard Dev: 6.68

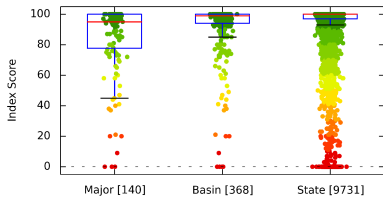


Localized Pollution Sources - Potential Contaminants

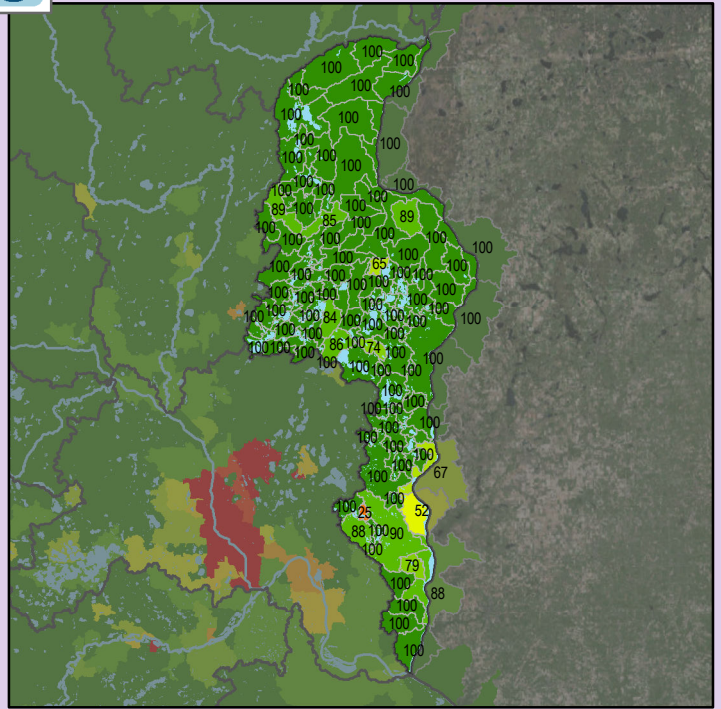


Health Score Distributions:

St. Croix R-Stillwtr
 Min: 0
 Max: 100
 Median: 95.0
 Mean: 84.56
 Standard Dev: 23.06

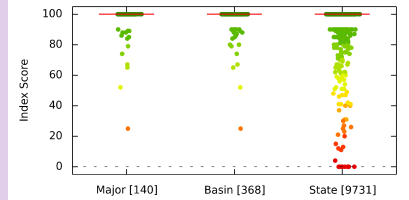


Localized Pollution Sources - Superfund Sites



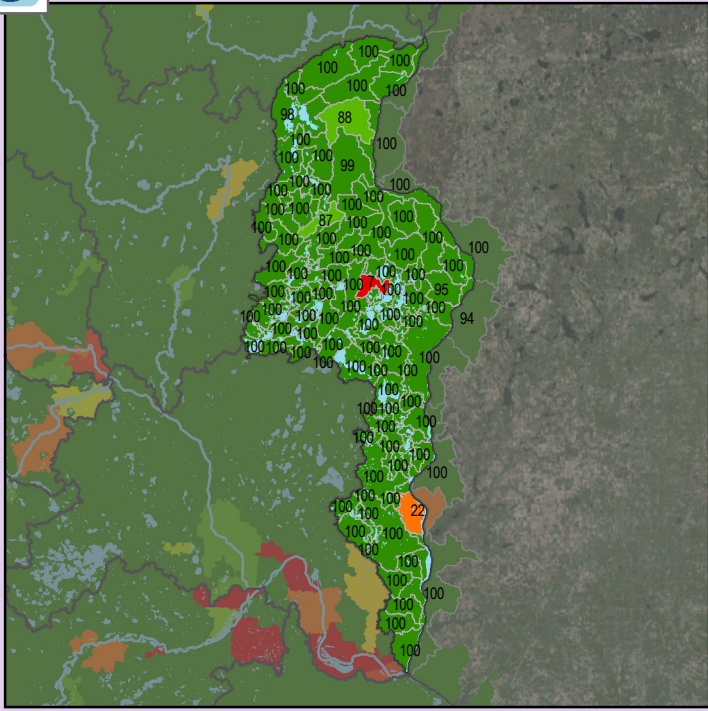
Health Score Distributions:

St. Croix R-Stillwtr
 Min: 25
 Max: 100
 Median: 100.0
 Mean: 97.58
 Standard Dev: 9.2



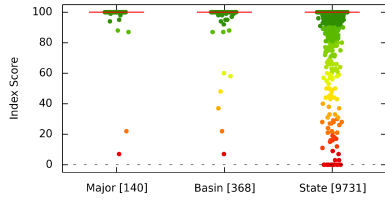


Localized Pollution Sources - Wastewater Treatment

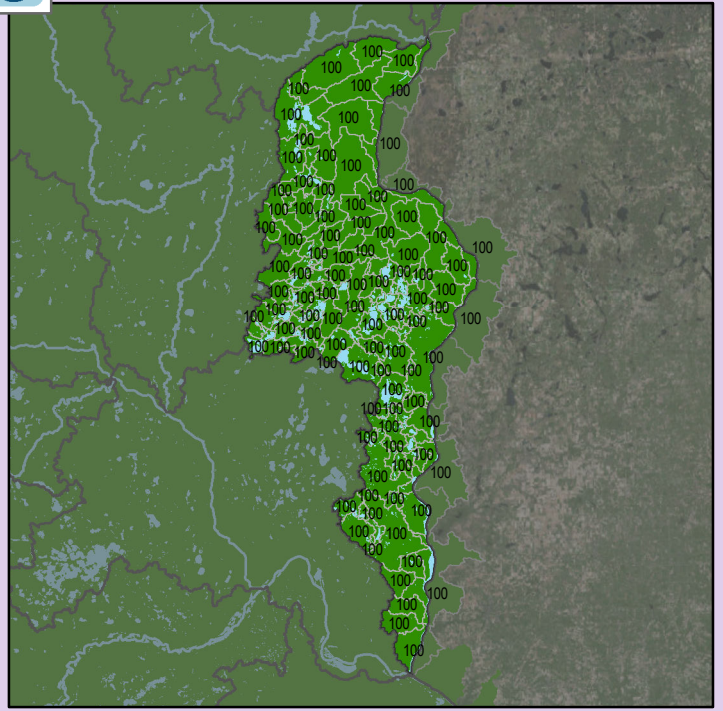


Health Score Distributions:

St. Croix R-Stillwtr
Min: 7
Max: 100
Median: 100.0
Mean: 98.5
Standard Dev: 10.28

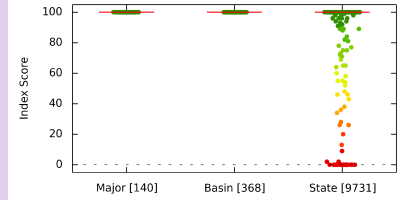


Localized Pollution Sources - Open Pit Mines

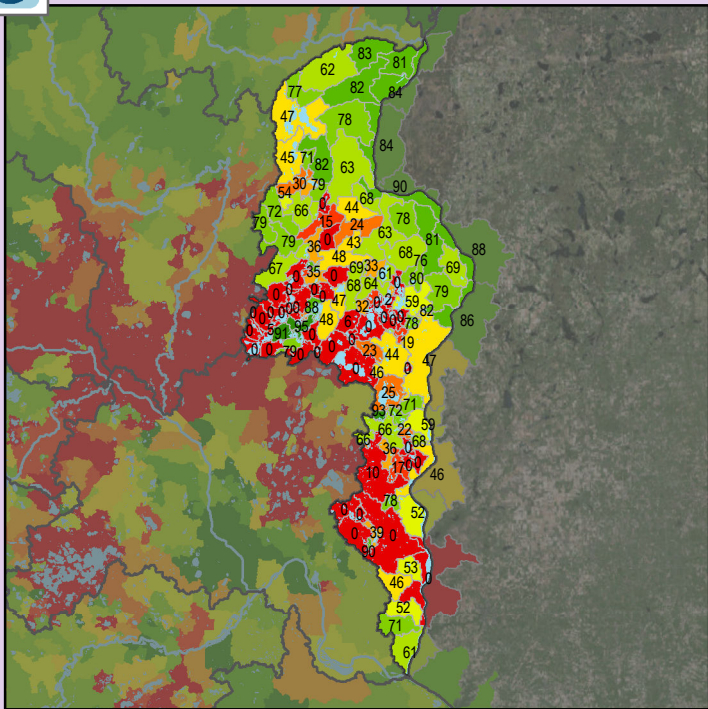


Health Score Distributions:

St. Croix R-Stillwtr
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-Stillwtr
Min: 0
Max: 100
Median: 46.0
Mean: 42.12
Standard Dev: 33.57

