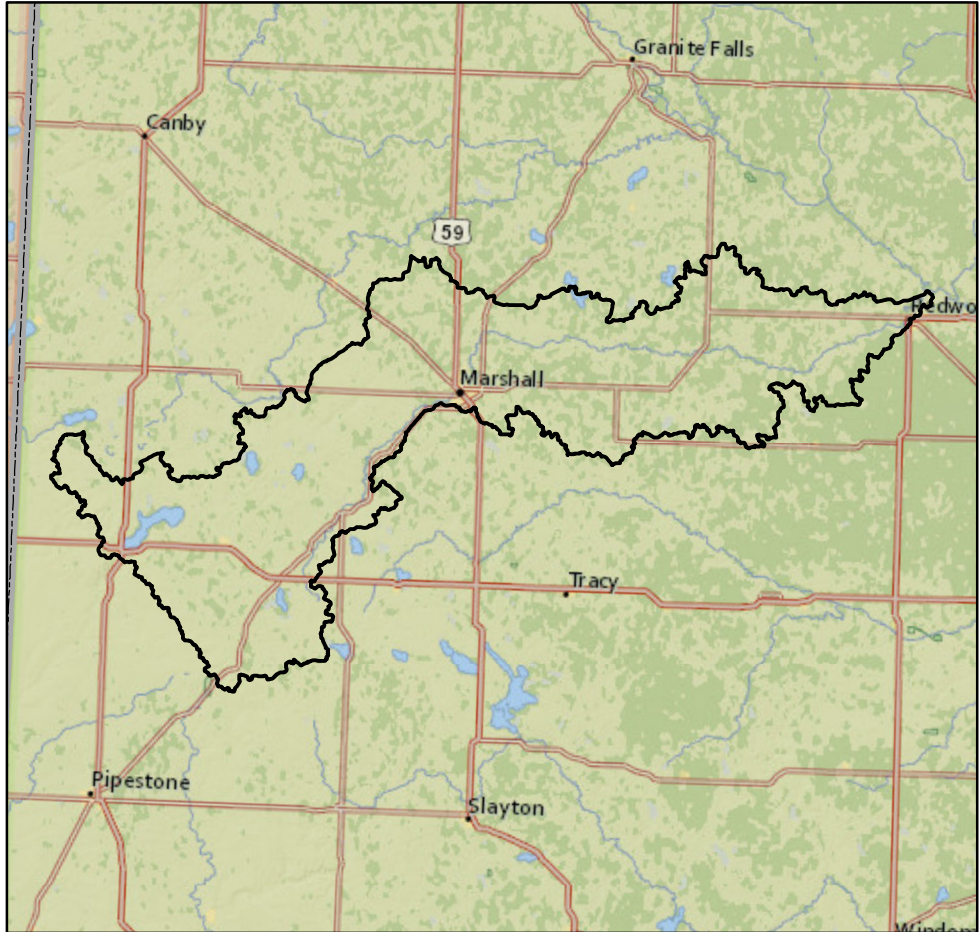




Watershed Report Card: **Redwood River**



People and Places:

Watershed Population:

2000 census - 23,901
 2010 census - 23,709

Largest Cities - Population:

Marshall - 13,680
 Redwood Falls - 5,254
 Tyler - 1,143
 Lake Benton - 683
 Lynd - 448

Counties - % of watershed:

Lyon - 43 %
 Redwood - 28 %
 Lincoln - 19 %
 Pipestone - 4 %
 Yellow Medicine - 3 %
 Murray - 2 %

Watershed Area:

Watershed size:

447,532 acres
 699 square miles

Watershed Surface Area:

Percent Land - 98 %
 Percent Water - 2 %

HUC8 ID:

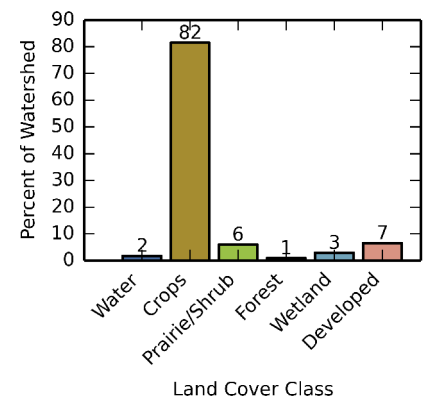
07020006

Basin Name:

Minnesota (0702)

Land Use:

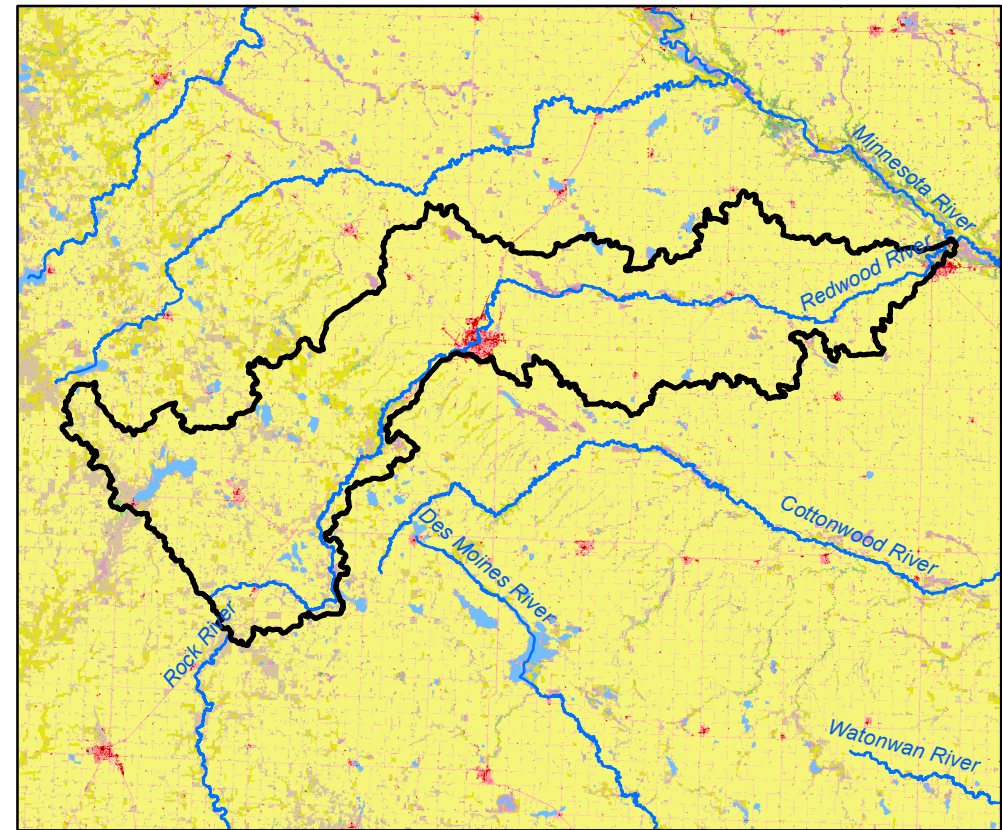
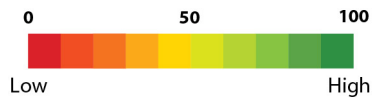
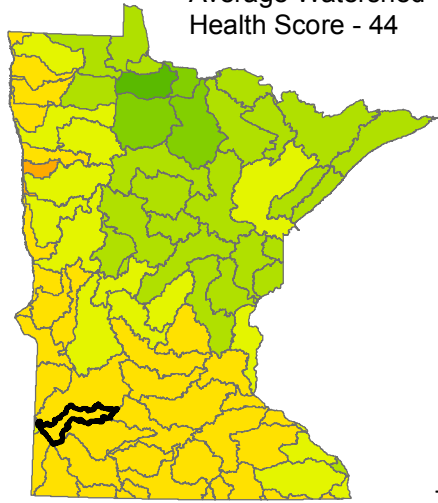
Percent of watershed area by land cover type:



Watershed Health Report - Major Watershed

Redwood River

Average Watershed Health Score - 44



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) 62

Index Scores

Perennial Cover*	13
Impervious Cover*	74
Water Withdrawal*	99
Flow Variability	71
Hydrologic Storage	30
Sub-Scores	
Altered Streams*	36
Surface Storage	24



Geomorphology

Component Health Score (index average) 55

Index Scores

Soil Erosion Potential*	71
Groundwater Susceptibility	57
Climate Vulnerability	38



Biology

Component Health Score (index average) 36

Index Scores

Terrestrial Habitat Quality*	4
Stream Species Quality*	59
Species Richness	53
At-Risk Species Richness	26



Connectivity

Component Health Score (index average) 19

Index Scores

Terrestrial Habitat Connectivity	6
Aquatic Connectivity*	23
Riparian Connectivity*	44



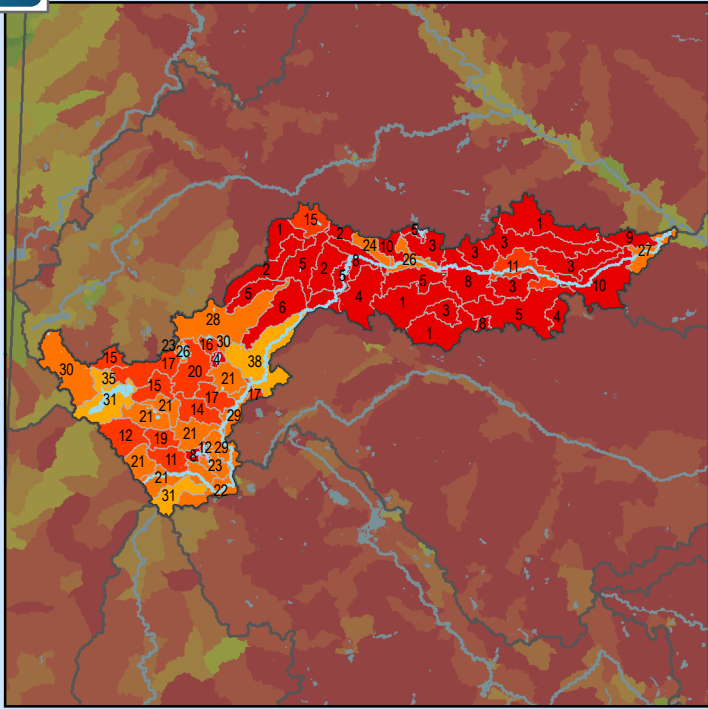
Water Quality

Component Health Score (index average) 46

Index Scores

Non-Point Pollution Sources	25
Sub-Score	
Phosphorus Risk*	8
Localized Pollution Sources*	86
Assessments	23

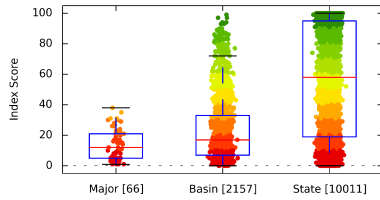
Perennial Cover (2011)



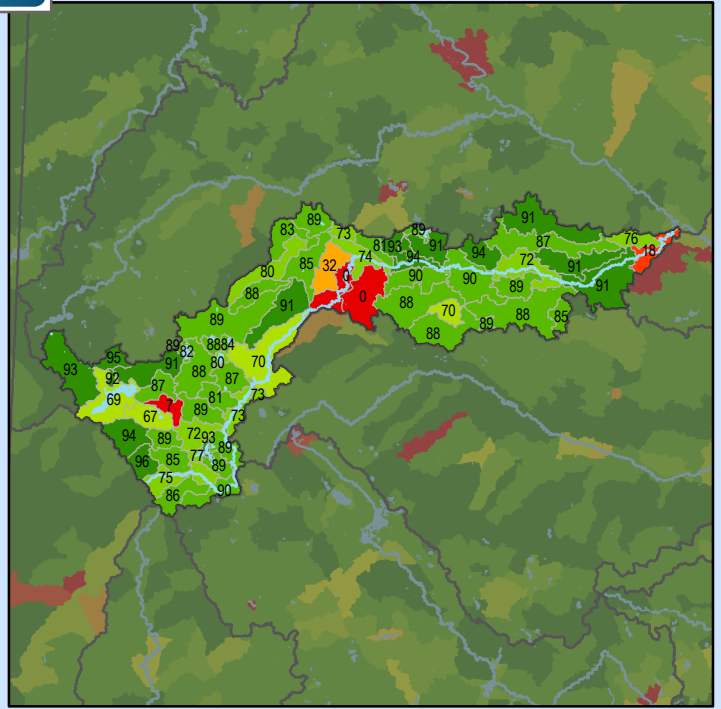
Health Score Distributions:

Redwood River

Min: 1
 Max: 38
 Median: 12.0
 Mean: 14.03
 Standard Dev: 10.18



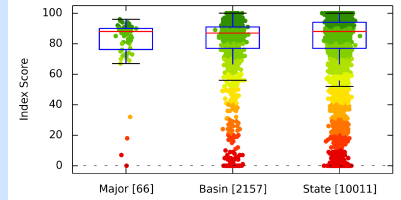
Impervious Cover (2011)



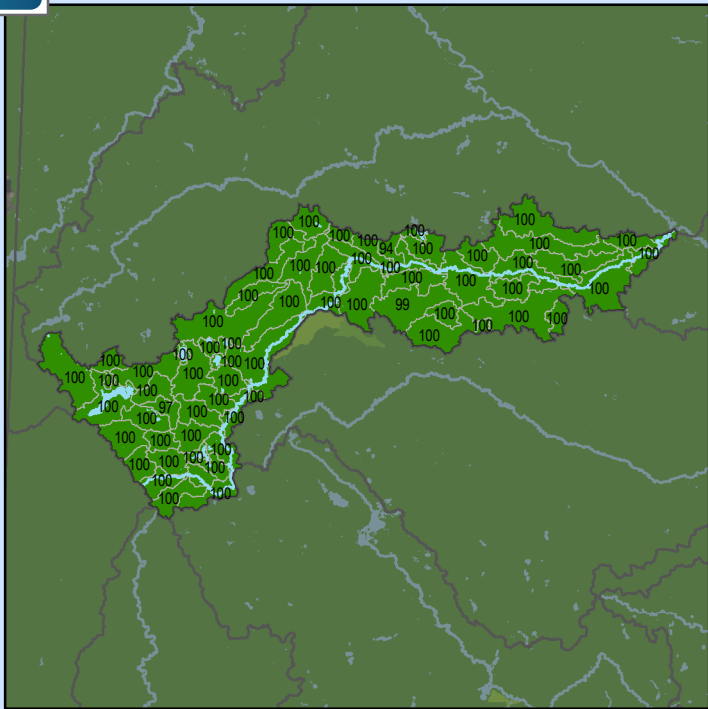
Health Score Distributions:

Redwood River

Min: 0
 Max: 96
 Median: 88.0
 Mean: 79.53
 Standard Dev: 21.09



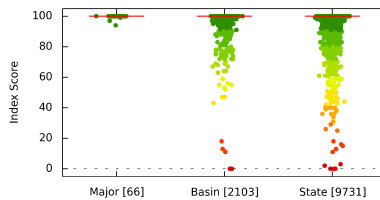
Water Withdrawal Index



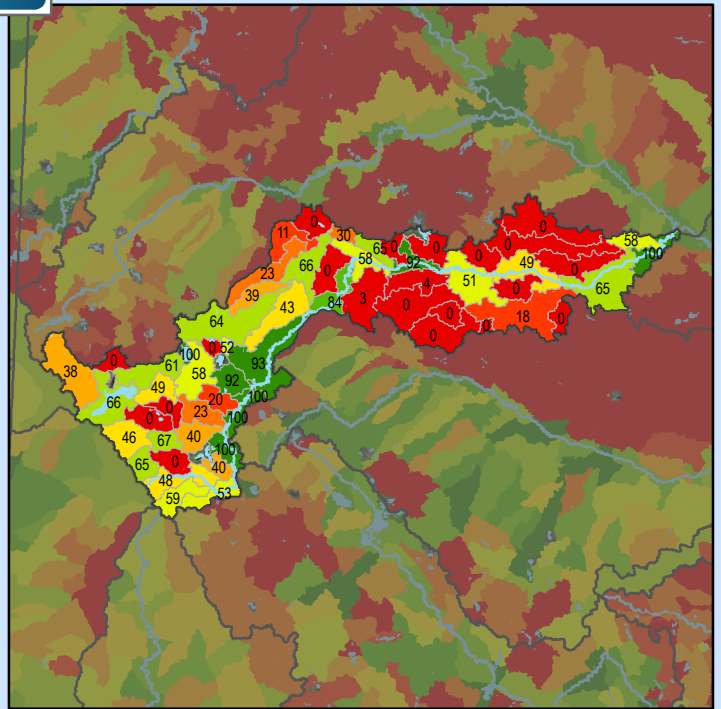
Health Score Distributions:

Redwood River

Min: 94
 Max: 100
 Median: 100.0
 Mean: 99.85
 Standard Dev: 0.82



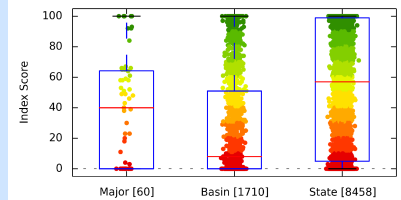
Altered Streams



Health Score Distributions:

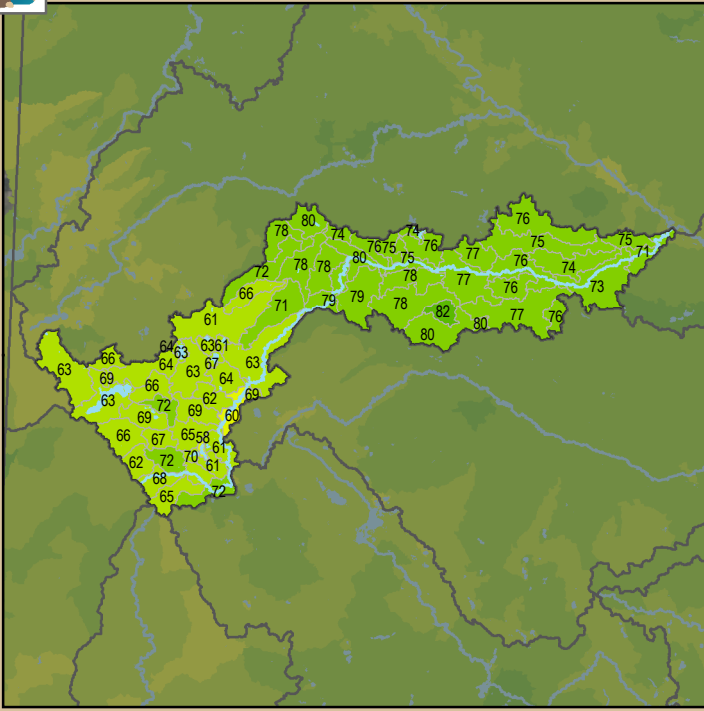
Redwood River

Min: 0
 Max: 100
 Median: 40.0
 Mean: 38.22
 Standard Dev: 34.27



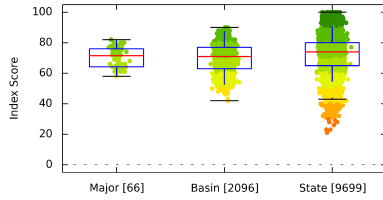


Soil Erosion Potential

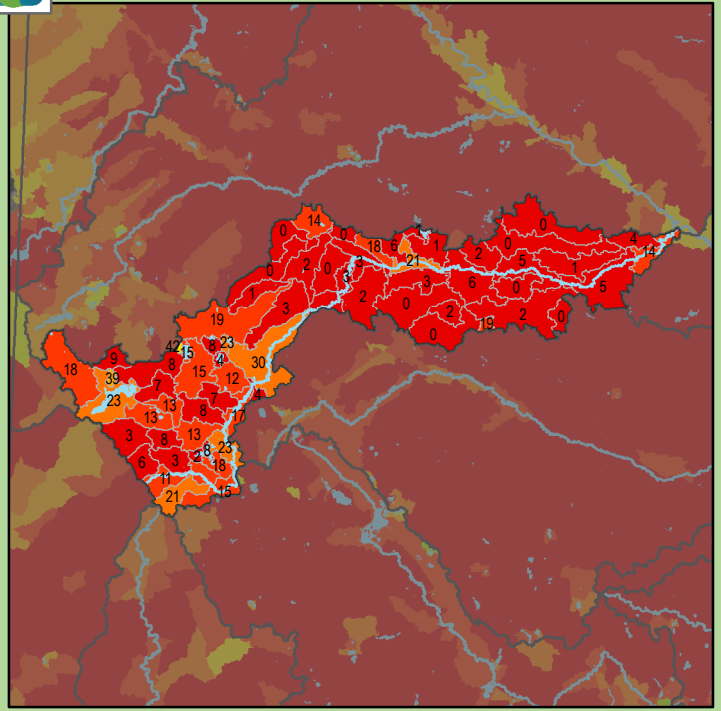


Health Score Distributions:

Redwood River
 Min: 58
 Max: 82
 Median: 71.5
 Mean: 70.61
 Standard Dev: 6.49

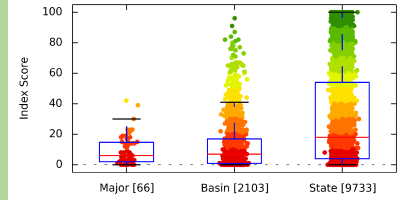


Terrestrial Habitat Quality

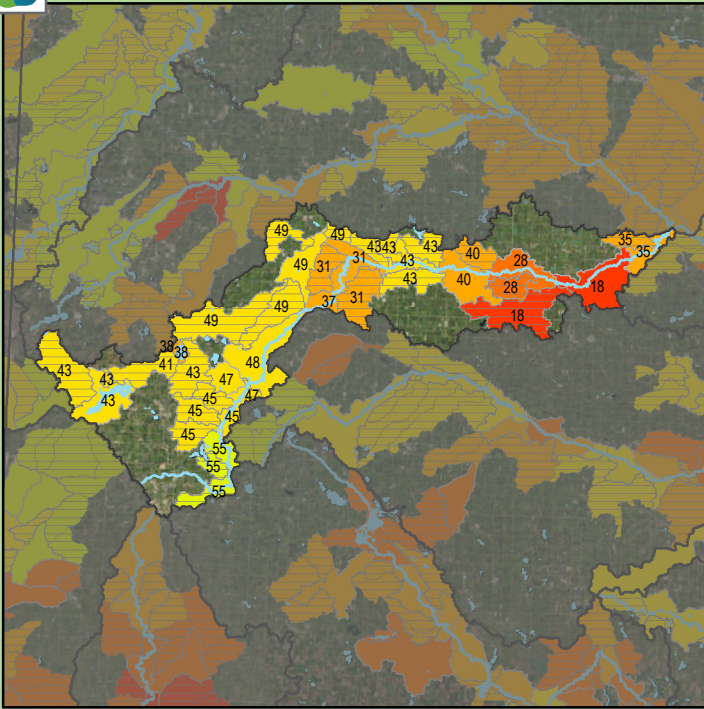


Health Score Distributions:

Redwood River
 Min: 0
 Max: 42
 Median: 6.0
 Mean: 9.14
 Standard Dev: 9.34

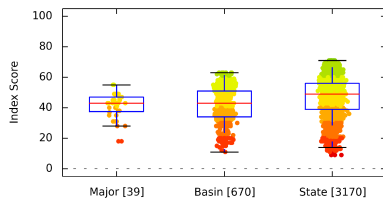


Stream Species Quality - Mussel Score

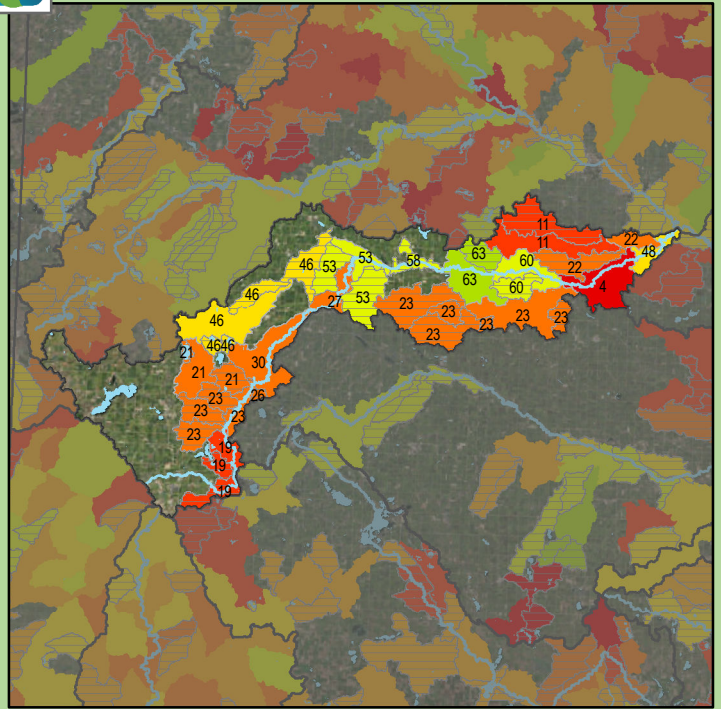


Health Score Distributions:

Redwood River
 Min: 18
 Max: 55
 Median: 43.0
 Mean: 41.23
 Standard Dev: 8.67

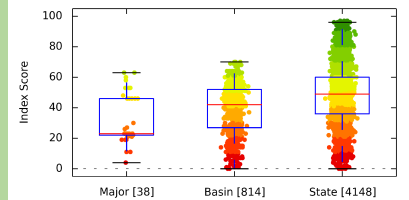


Stream Species Quality - Aquatic Invertebrate IBI



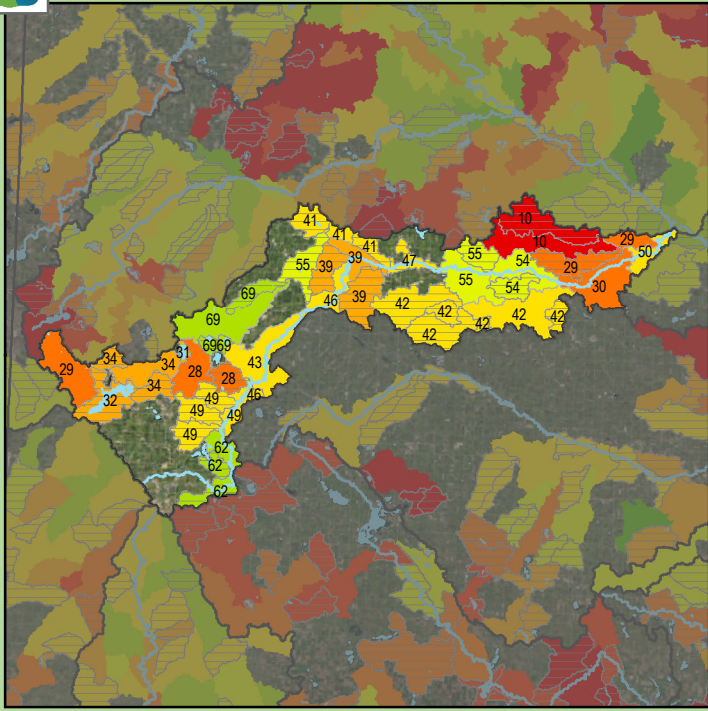
Health Score Distributions:

Redwood River
 Min: 4
 Max: 63
 Median: 23.0
 Mean: 32.74
 Standard Dev: 16.48



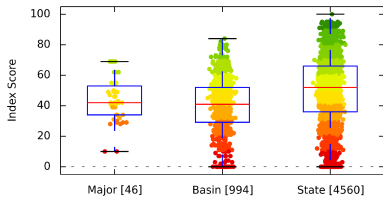


Stream Species Quality - Fish IBI

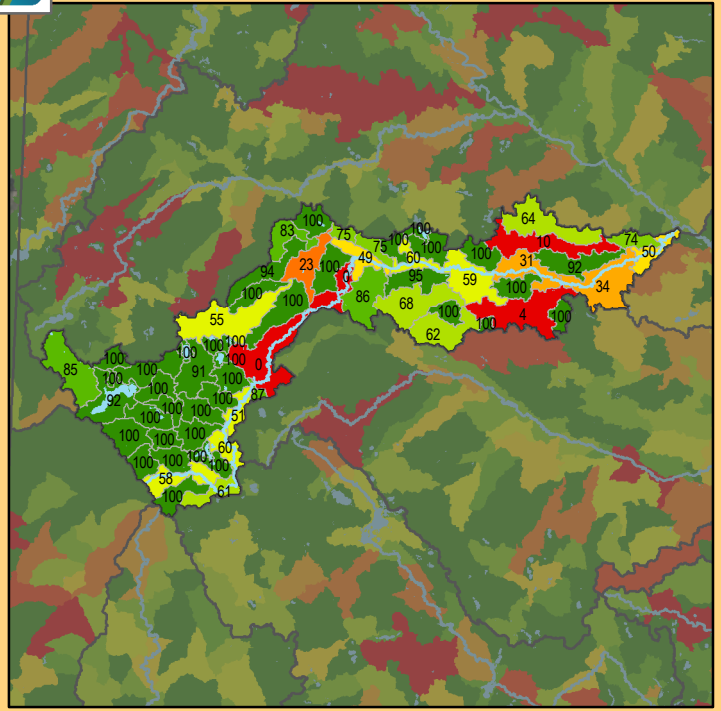


Health Score Distributions:

Redwood River
 Min: 10
 Max: 69
 Median: 42.0
 Mean: 43.76
 Standard Dev: 13.69

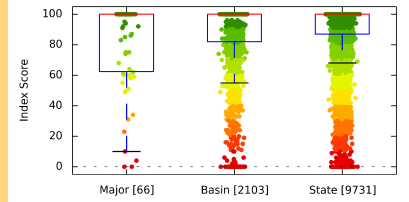


Aquatic Connectivity

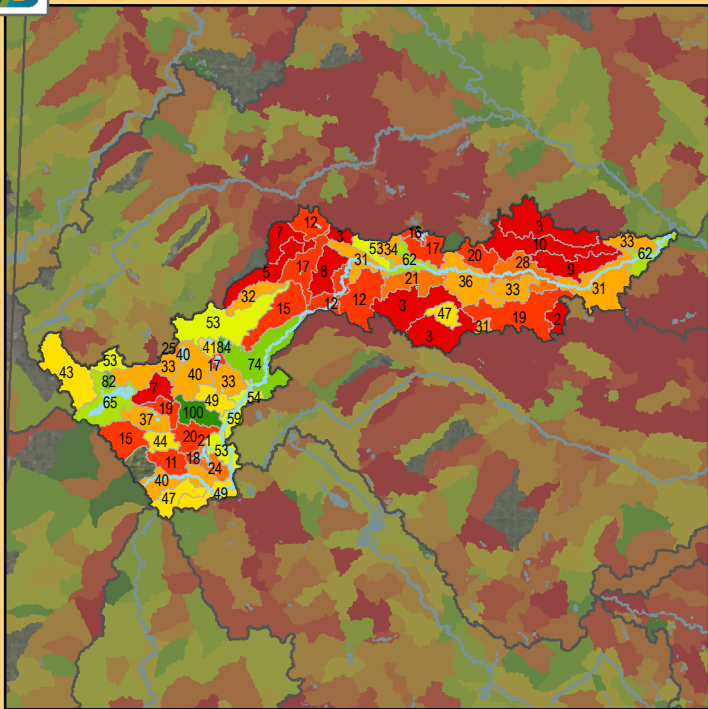


Health Score Distributions:

Redwood River
 Min: 0
 Max: 100
 Median: 100.0
 Mean: 80.73
 Standard Dev: 28.17

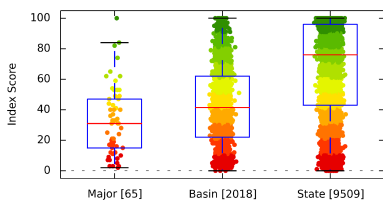


Riparian Connectivity

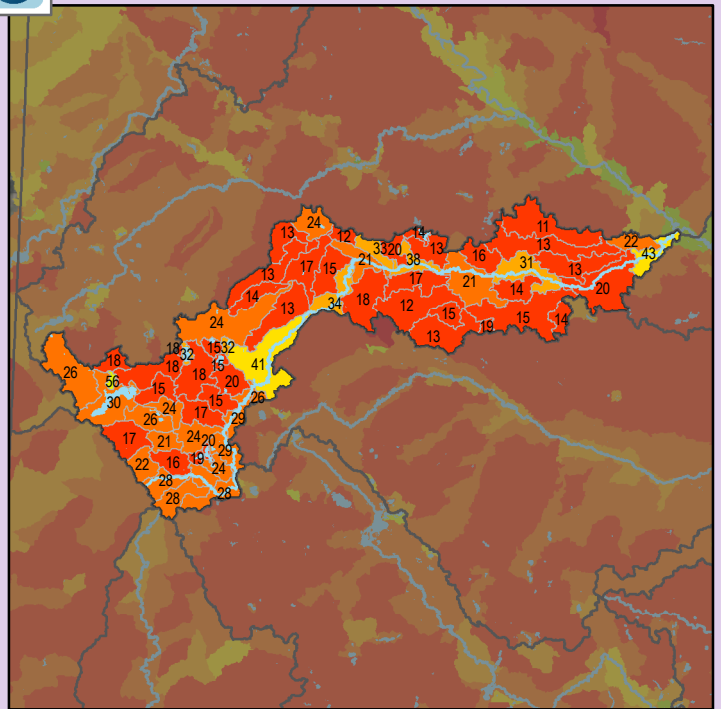


Health Score Distributions:

Redwood River
 Min: 2
 Max: 100
 Median: 31.0
 Mean: 31.95
 Standard Dev: 21.93

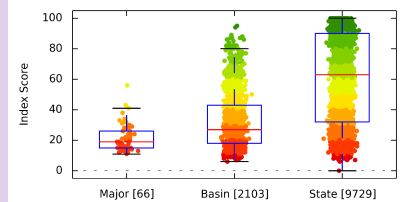


Non-Point Source - Phosphorus Risk



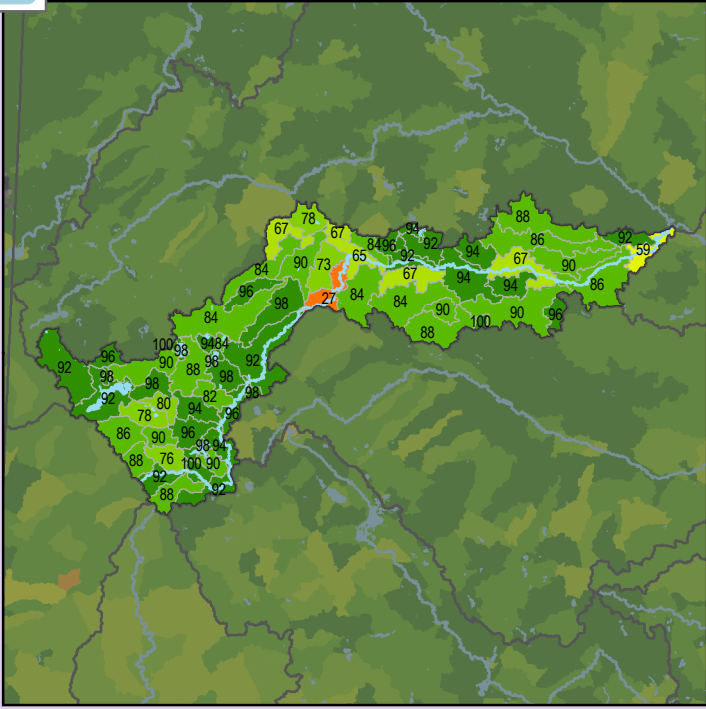
Health Score Distributions:

Redwood River
 Min: 11
 Max: 56
 Median: 19.0
 Mean: 21.39
 Standard Dev: 8.57



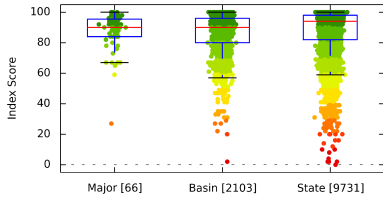


Localized Pollution Sources

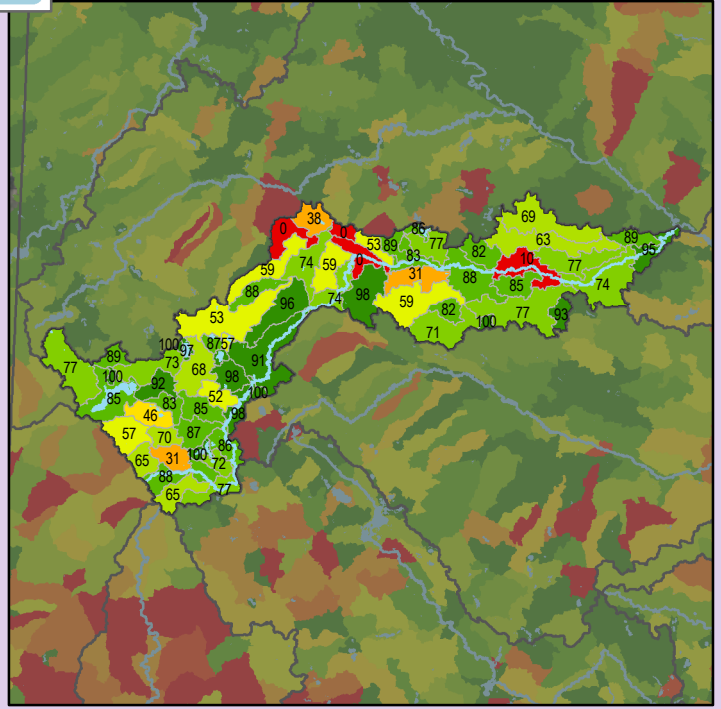


Health Score Distributions:

Redwood River
 Min: 27
 Max: 100
 Median: 90.0
 Mean: 87.45
 Standard Dev: 12.08

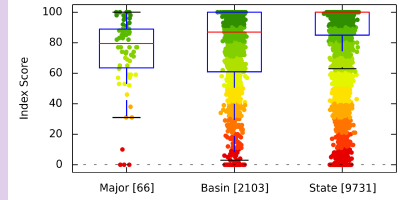


Localized Pollution Sources - Animal Units

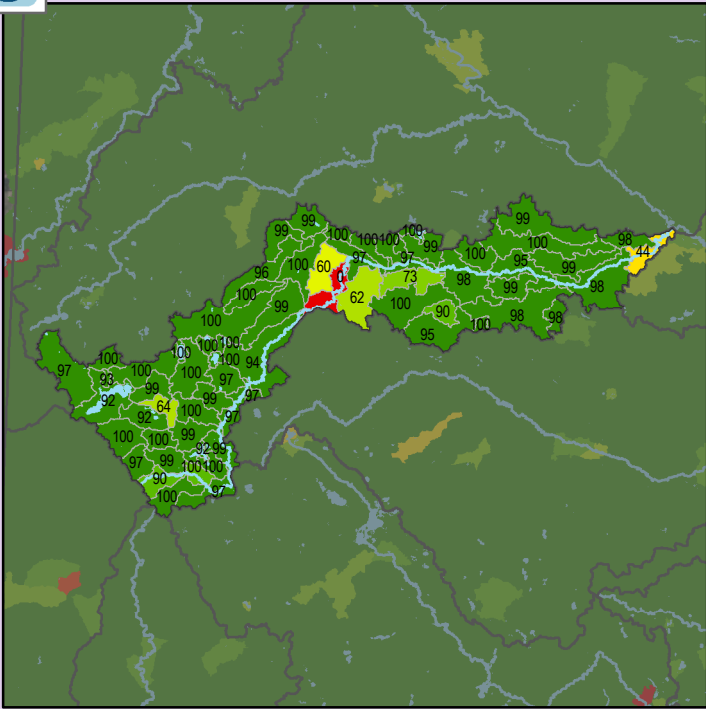


Health Score Distributions:

Redwood River
 Min: 0
 Max: 100
 Median: 79.5
 Mean: 73.45
 Standard Dev: 24.85

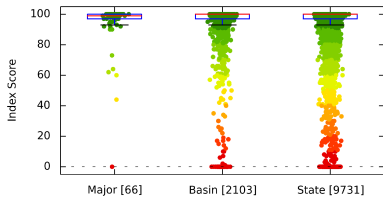


Localized Pollution Sources - Potential Contaminants

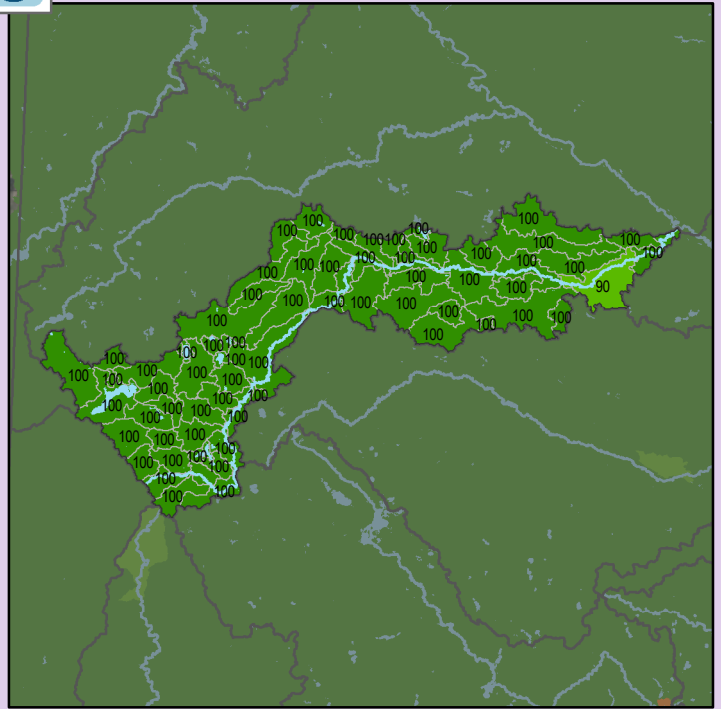


Health Score Distributions:

Redwood River
 Min: 0
 Max: 100
 Median: 99.0
 Mean: 93.73
 Standard Dev: 15.69

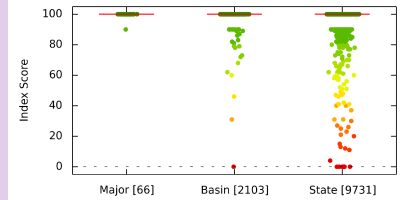


Localized Pollution Sources - Superfund Sites



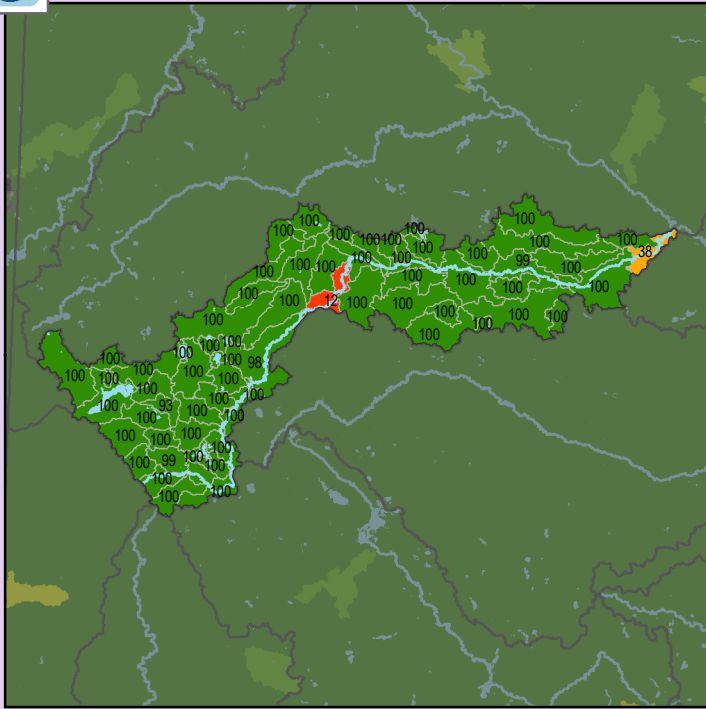
Health Score Distributions:

Redwood River
 Min: 90
 Max: 100
 Median: 100.0
 Mean: 99.85
 Standard Dev: 1.22



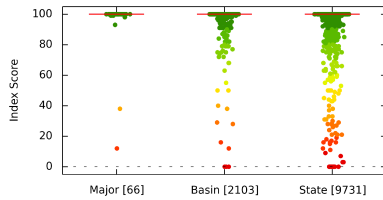


Localized Pollution Sources - Wastewater Treatment

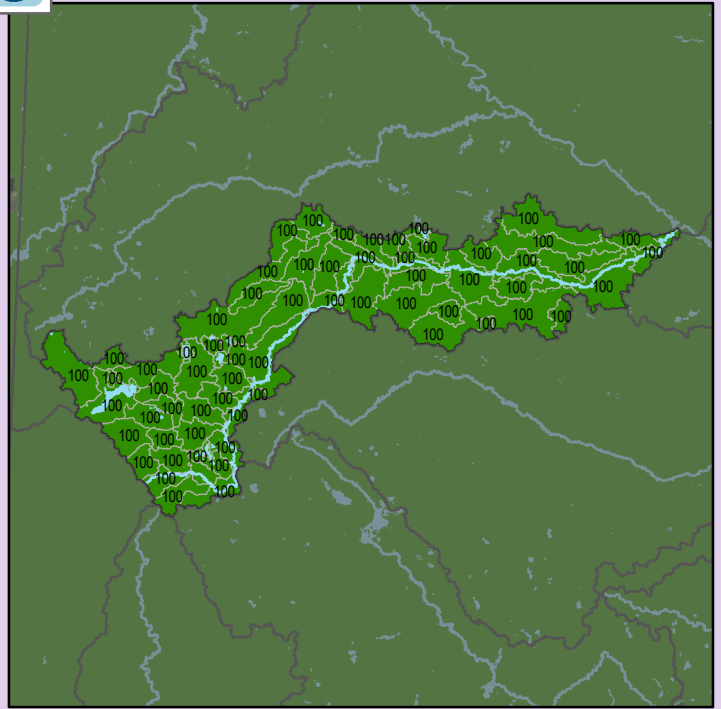


Health Score Distributions:

Redwood River
 Min: 12
 Max: 100
 Median: 100.0
 Mean: 97.56
 Standard Dev: 13.06

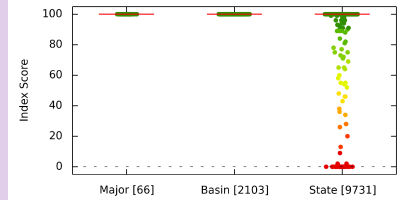


Localized Pollution Sources - Open Pit Mines

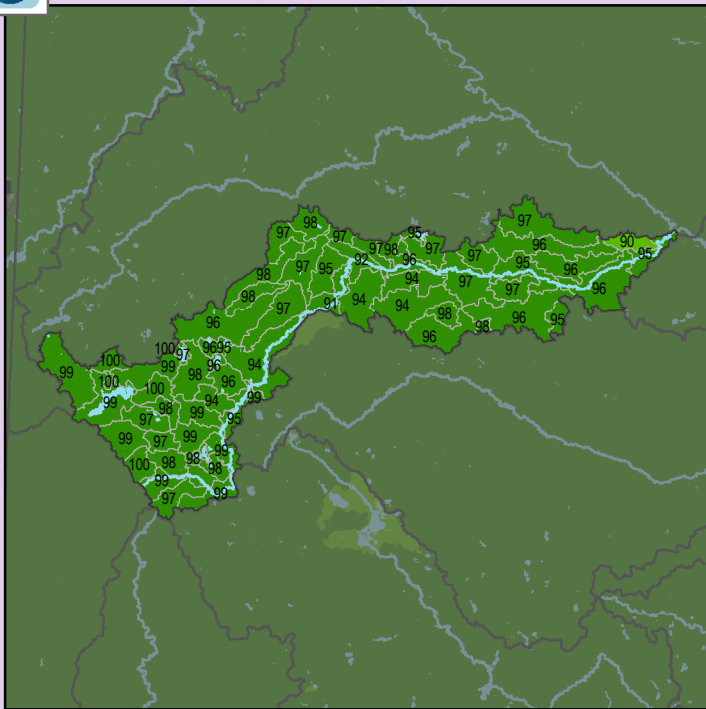


Health Score Distributions:

Redwood River
 Min: 100
 Max: 100
 Median: 100.0
 Mean: 100.0
 Standard Dev: 0.0



Localized Pollution Sources - Septic Systems



Health Score Distributions:

Redwood River
 Min: 90
 Max: 100
 Median: 97.0
 Mean: 96.88
 Standard Dev: 2.12

