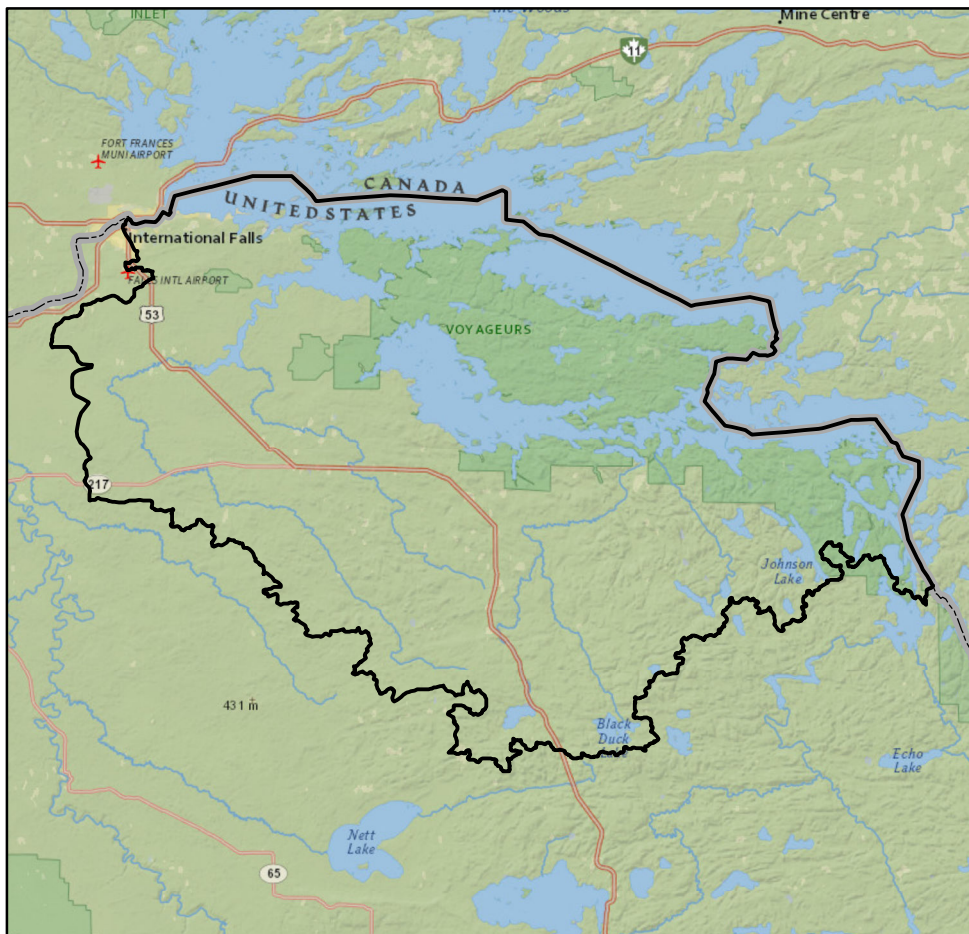
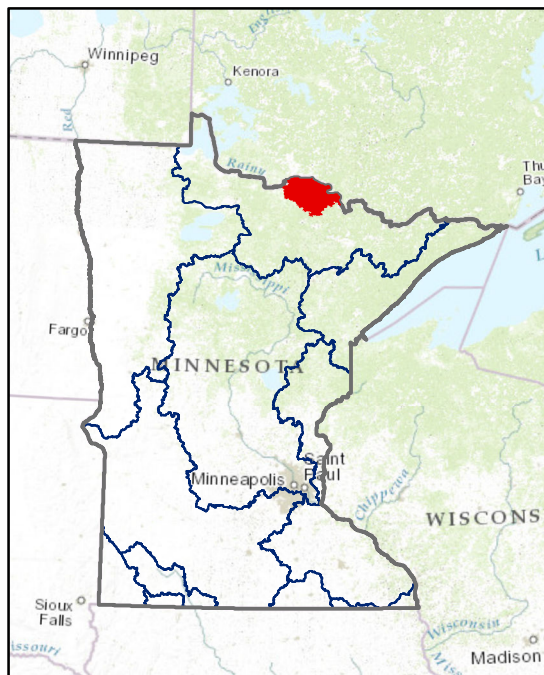


Watershed Report Card: Rainy R-Rainy Lake



People and Places:

Watershed Population:

2000 census - 5,482

2010 census - 5,103

Largest Cities - Population:

Ranier - 145

Ash Lake - None

Arbutus - None

Ray - None

Kabetogama - None

Counties - % of watershed:

St. Louis - 64 %

Koochiching - 36 %

Watershed Area:

Watershed size:

582,765 acres

911 square miles

Watershed Surface Area:

Percent Land - 83 %

Percent Water - 17 %

HUC8 ID:

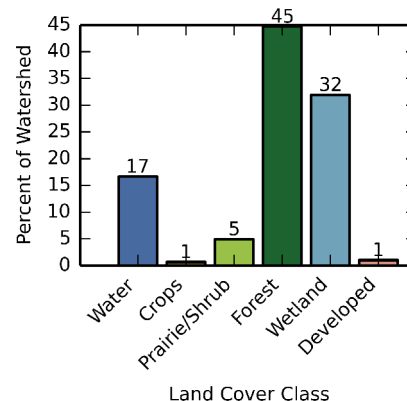
09030003

Basin Name:

Rainy River (0903)

Land Use:

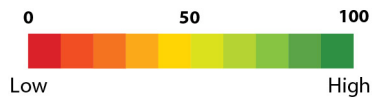
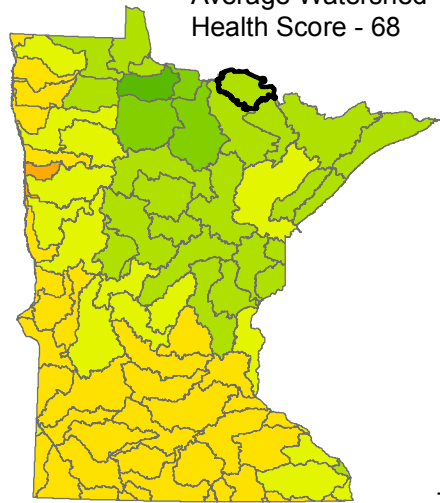
Percent of watershed area by land cover type:



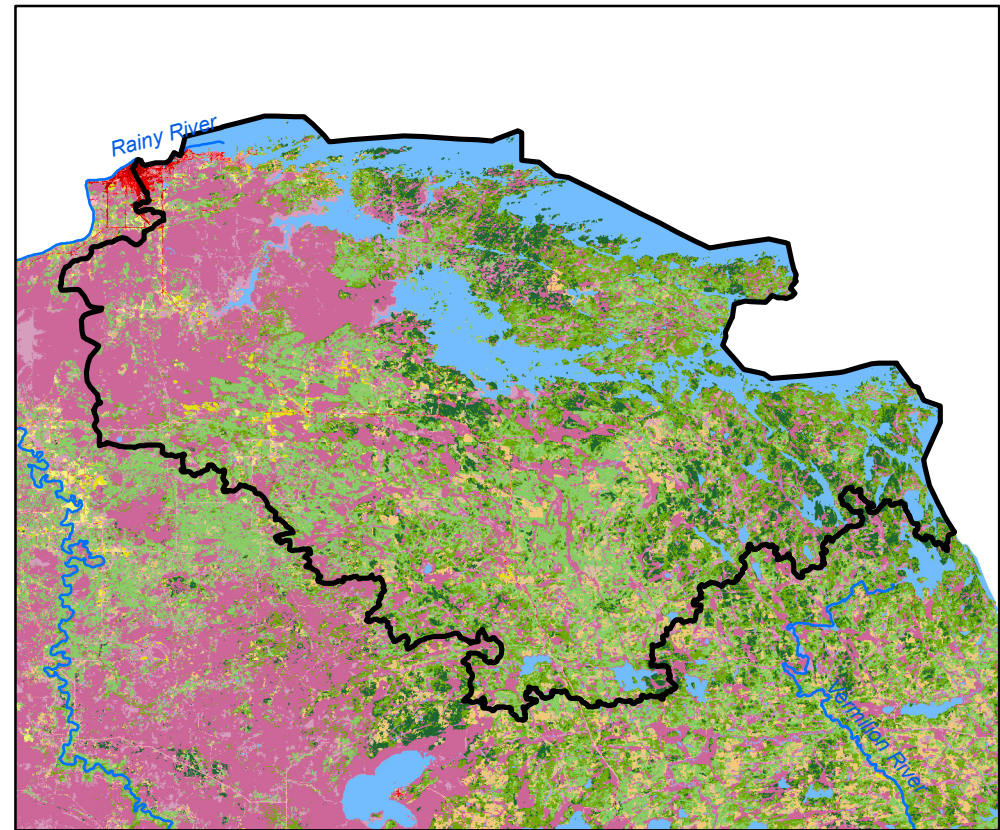
Watershed Health Report - Major Watershed

Rainy R-Rainy Lake

Average Watershed
Health Score - 68



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) 93

Index Scores

Perennial Cover*	98
Impervious Cover*	89
Water Withdrawal*	99
Flow Variability	74
Hydrologic Storage	93
Sub-Scores	
Altered Streams*	87
Surface Storage	100



Geomorphology

Component Health Score
(index average) 69

Index Scores

Soil Erosion Potential*	66
Groundwater Susceptibility	86
Climate Vulnerability	53



Biology

Component Health Score
(index average) 51

Index Scores

Terrestrial Habitat Quality*	37
Stream Species Quality*	88
Species Richness	53
At-Risk Species Richness	27



Connectivity

Component Health Score
(index average) 63

Index Scores

Terrestrial Habitat Connectivity	49
Aquatic Connectivity*	91
Riparian Connectivity*	99



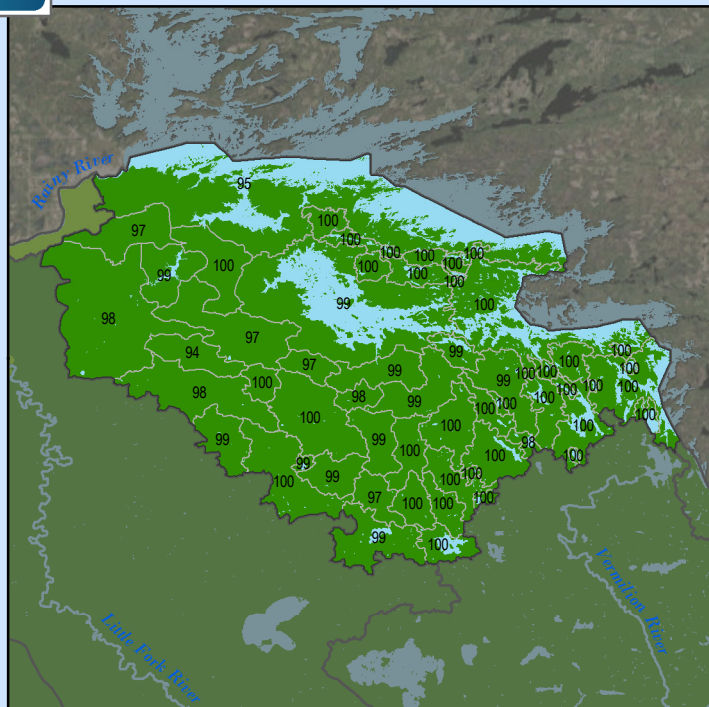
Water Quality

Component Health Score
(index average) 66

Index Scores

Non-Point Pollution Sources	97
Sub-Score	
Phosphorus Risk*	92
Localized Pollution Sources*	92
Assessments	1

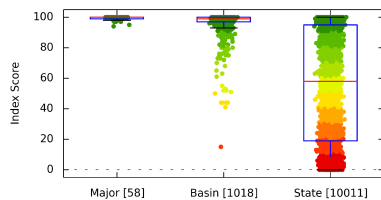
Perennial Cover (2011)



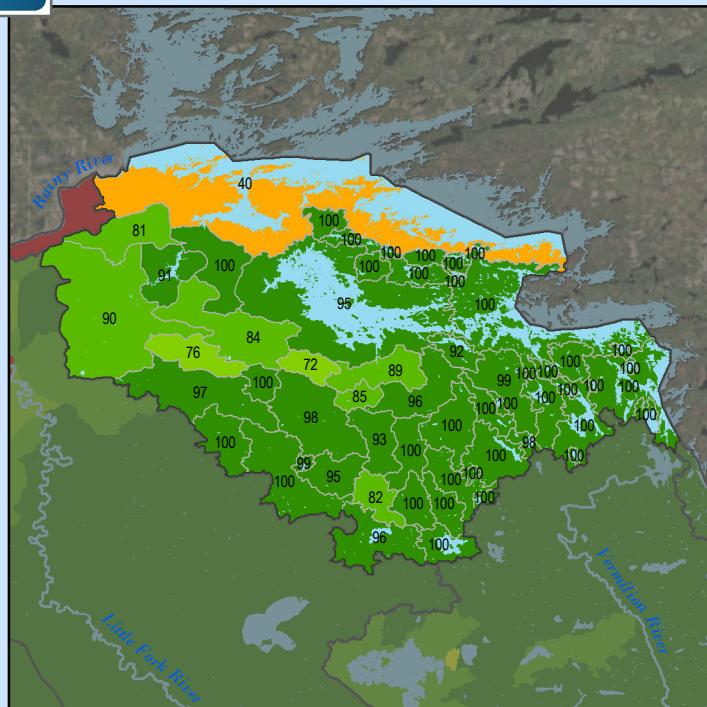
Health Score Distributions:

Rainy R-Rainy Lake

Min: 94
Max: 100
Median: 100.0
Mean: 99.28
Standard Dev: 1.27



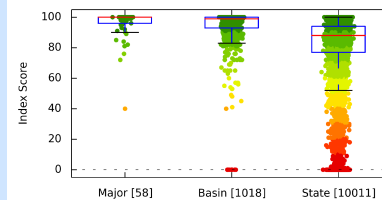
Impervious Cover (2011)



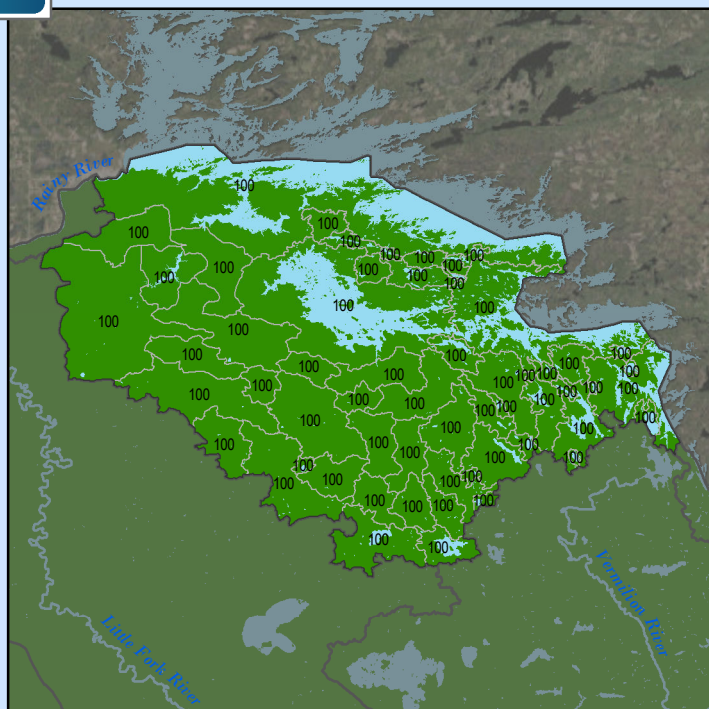
Health Score Distributions:

Rainy R-Rainy Lake

Min: 40
Max: 100
Median: 100.0
Mean: 95.66
Standard Dev: 9.78



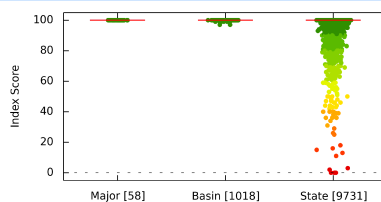
Water Withdrawal Index



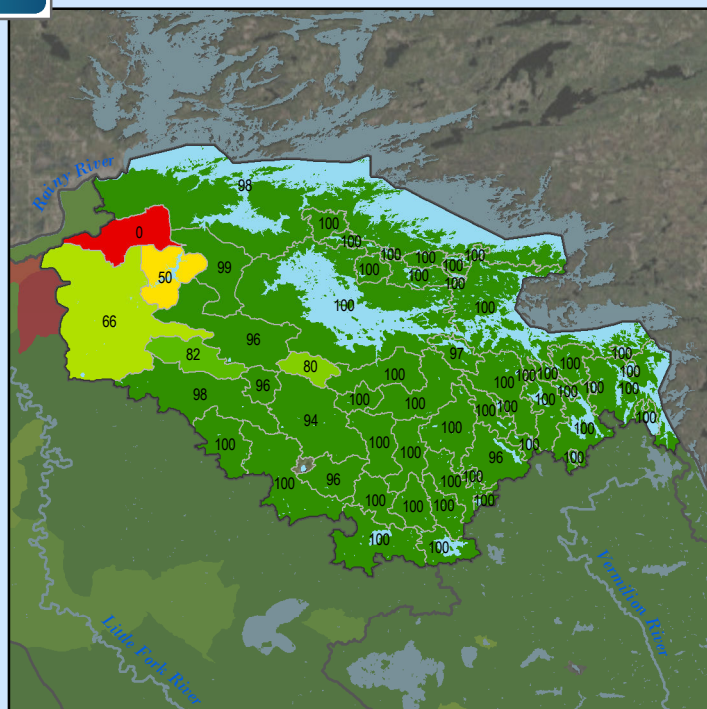
Health Score Distributions:

Rainy R-Rainy Lake

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



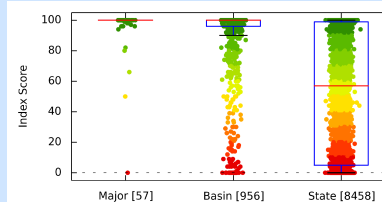
Altered Streams



Health Score Distributions:

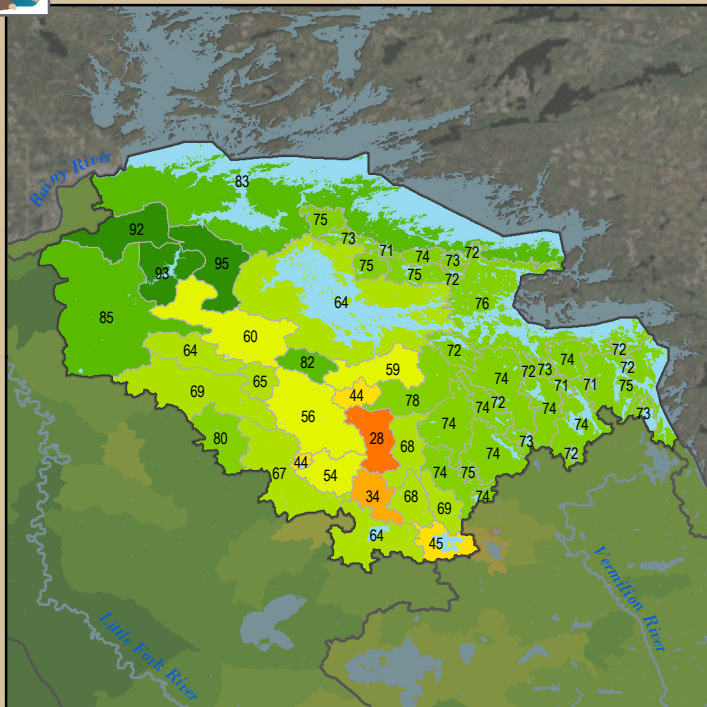
Rainy R-Rainy Lake

Min: 0
Max: 100
Median: 100.0
Mean: 95.58
Standard Dev: 15.32





Soil Erosion Potential



Health Score Distributions:

Rainy R-Rainy Lake

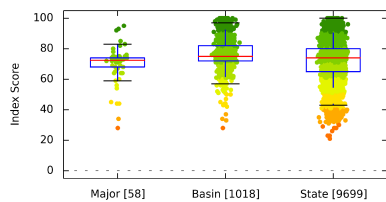
Min: 28

Max: 95

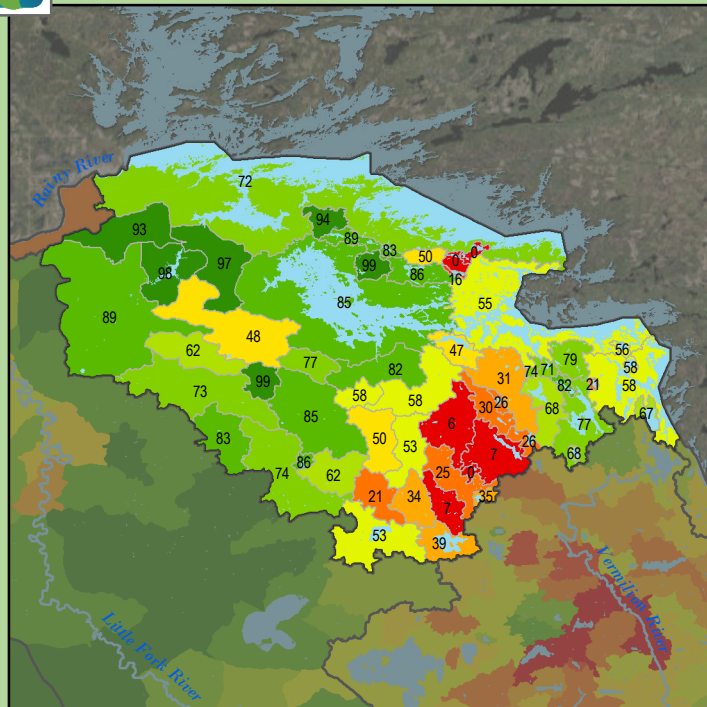
Median: 72.5

Mean: 69.91

Standard Dev: 12.18



Terrestrial Habitat Quality



Health Score Distributions:

Rainy R-Rainy Lake

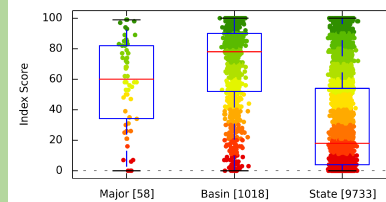
Min: 0

Max: 99

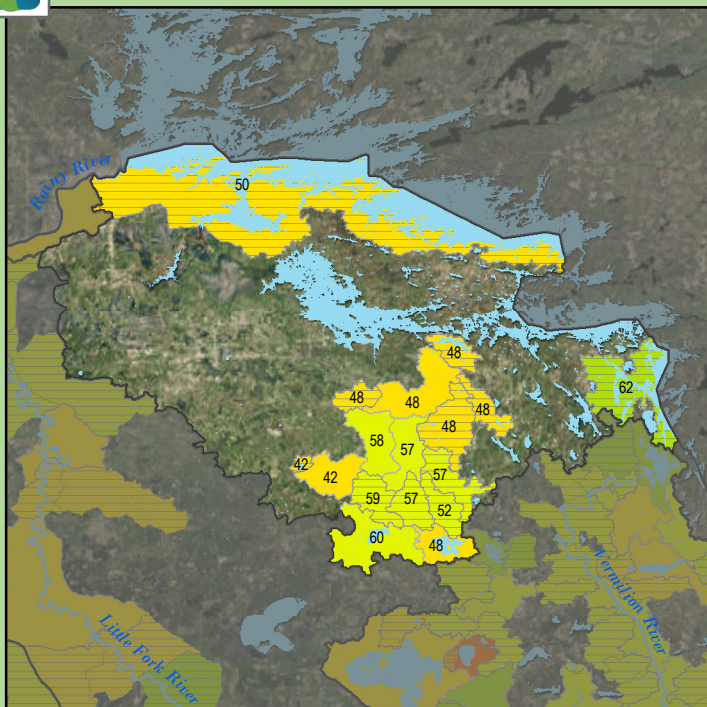
Median: 60.0

Mean: 57.28

Standard Dev: 28.75



Stream Species Quality - Mussel Score



Health Score Distributions:

Rainy R-Rainy Lake

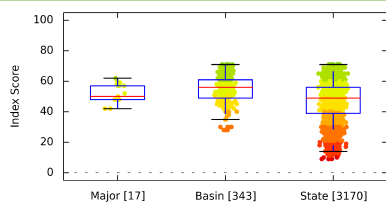
Min: 42

Max: 62

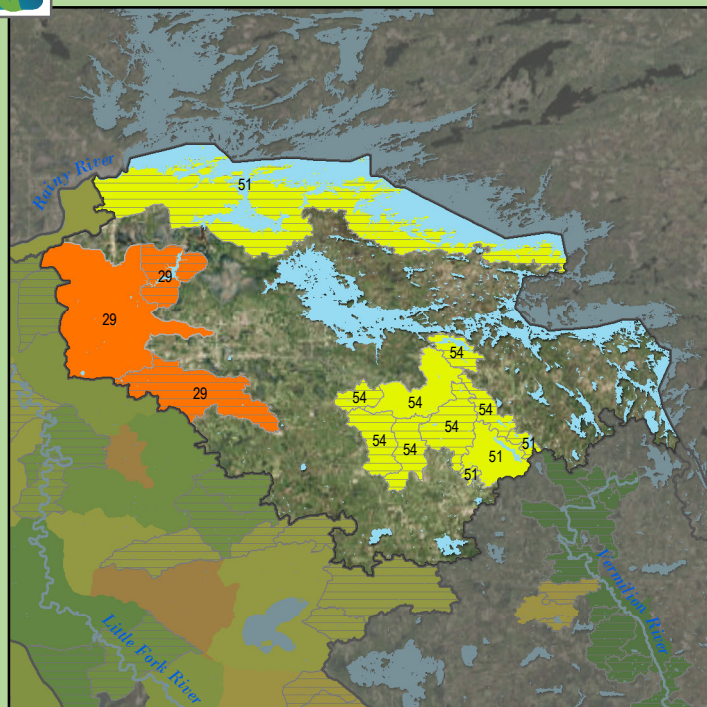
Median: 50.0

Mean: 52.0

Standard Dev: 6.06



Stream Species Quality - Aquatic Invertebrate IBI



Health Score Distributions:

Rainy R-Rainy Lake

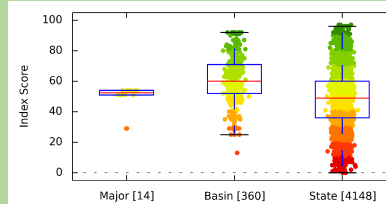
Min: 29

Max: 54

Median: 52.5

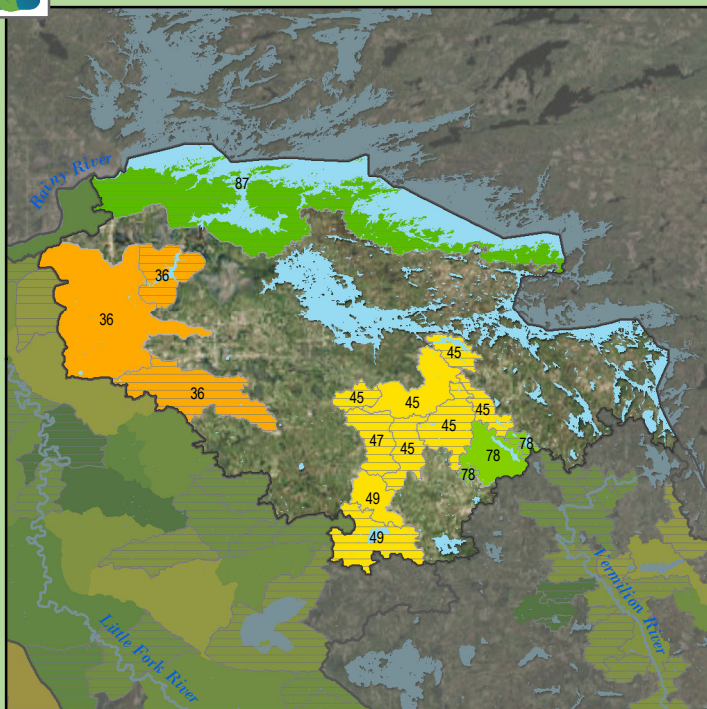
Mean: 47.79

Standard Dev: 9.89





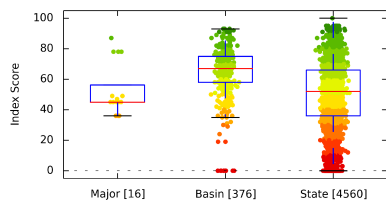
Stream Species Quality - Fish IBI



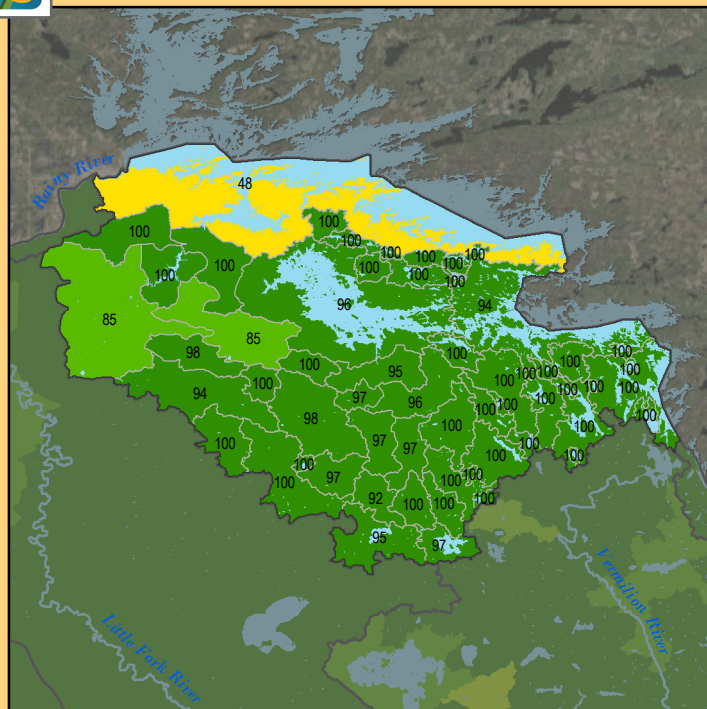
Health Score Distributions:

Rainy R-Rainy Lake

Min: 36
Max: 87
Median: 45.0
Mean: 52.75
Standard Dev: 16.49



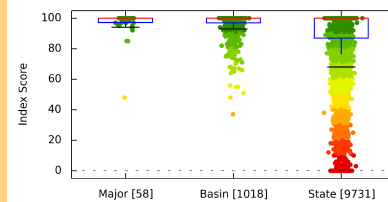
Aquatic Connectivity



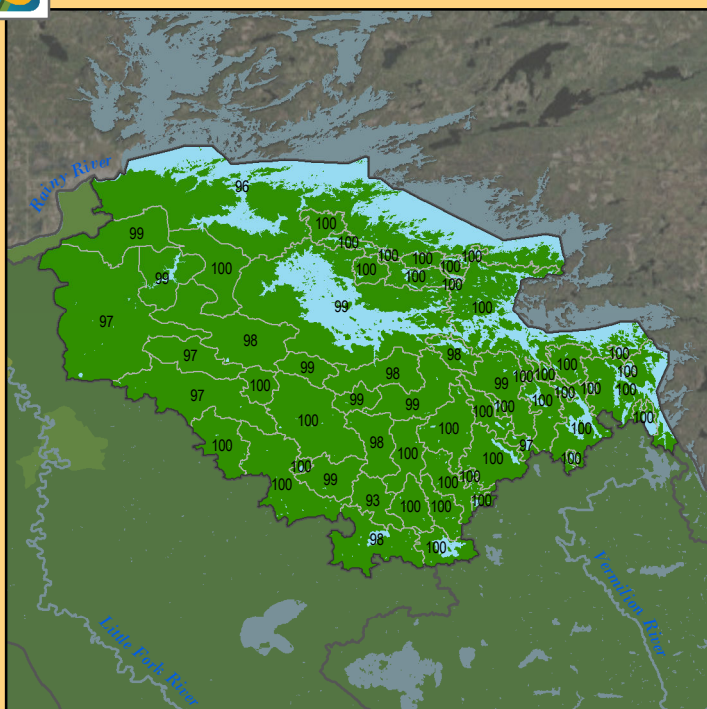
Health Score Distributions:

Rainy R-Rainy Lake

Min: 48
Max: 100
Median: 100.0
Mean: 97.6
Standard Dev: 7.3



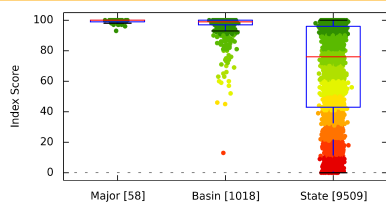
Riparian Connectivity



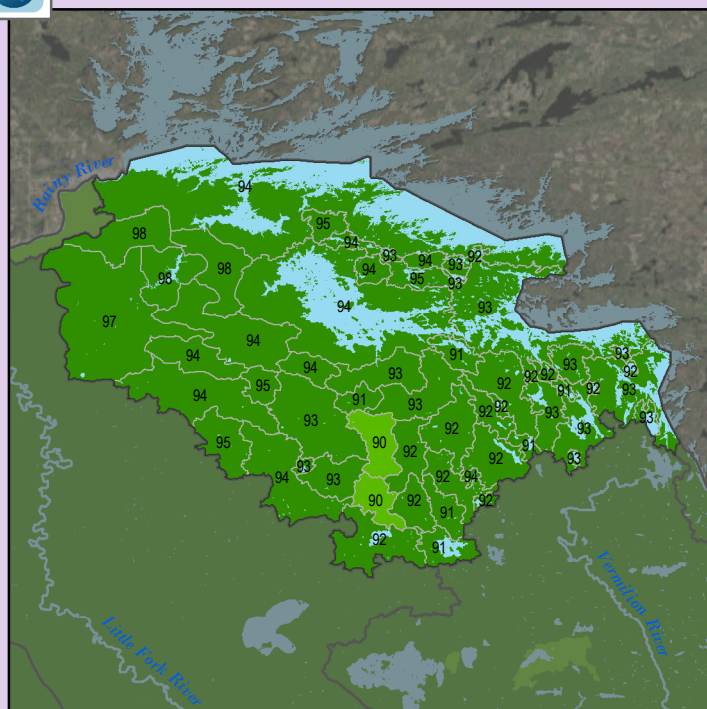
Health Score Distributions:

Rainy R-Rainy Lake

Min: 93
Max: 100
Median: 100.0
Mean: 99.29
Standard Dev: 1.31



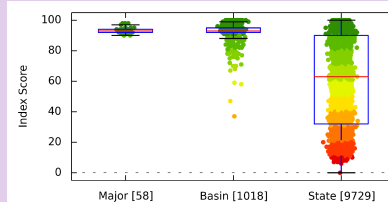
Non-Point Source - Phosphorus Risk



Health Score Distributions:

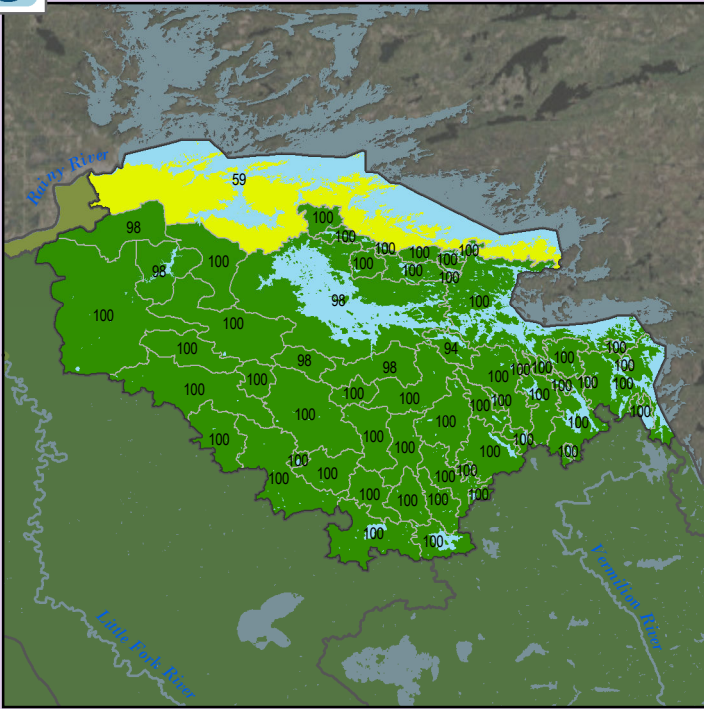
Rainy R-Rainy Lake

Min: 90
Max: 98
Median: 93.0
Mean: 93.09
Standard Dev: 1.73





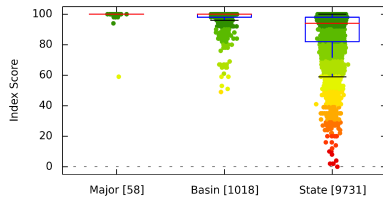
Localized Pollution Sources



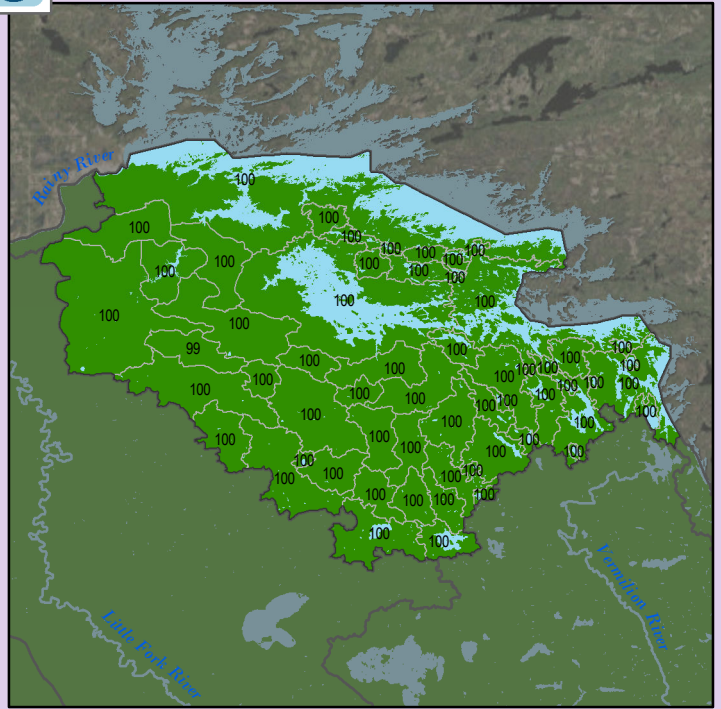
Health Score Distributions:

Rainy R-Rainy Lake

Min: 59
Max: 100
Median: 100.0
Mean: 99.02
Standard Dev: 5.38



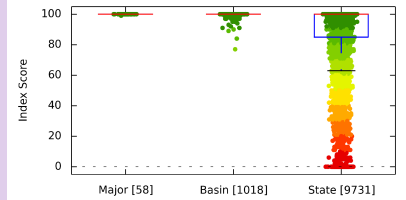
Localized Pollution Sources - Animal Units



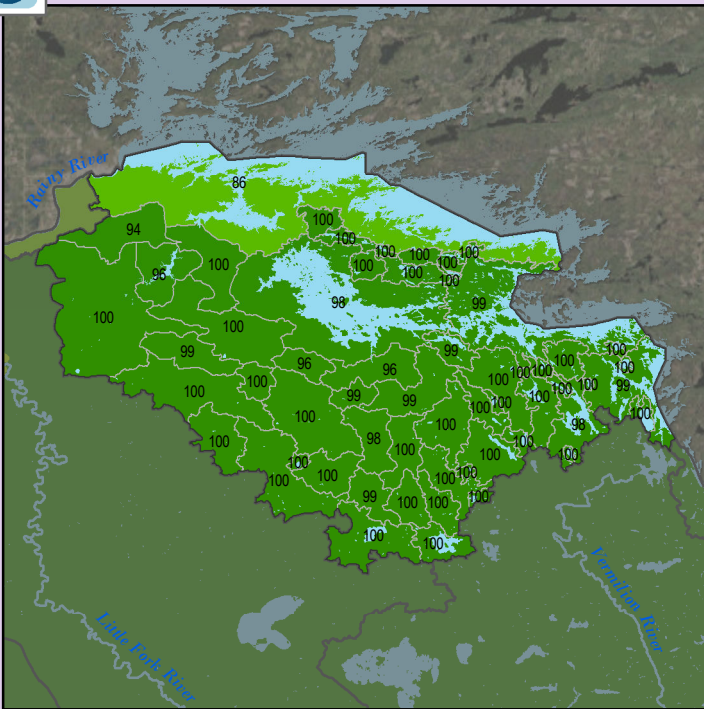
Health Score Distributions:

Rainy R-Rainy Lake

Min: 99
Max: 100
Median: 100.0
Mean: 99.98
Standard Dev: 0.13



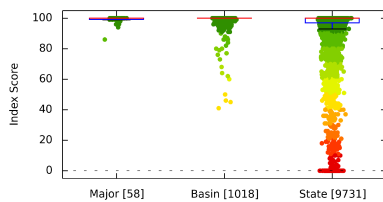
Localized Pollution Sources - Potential Contaminants



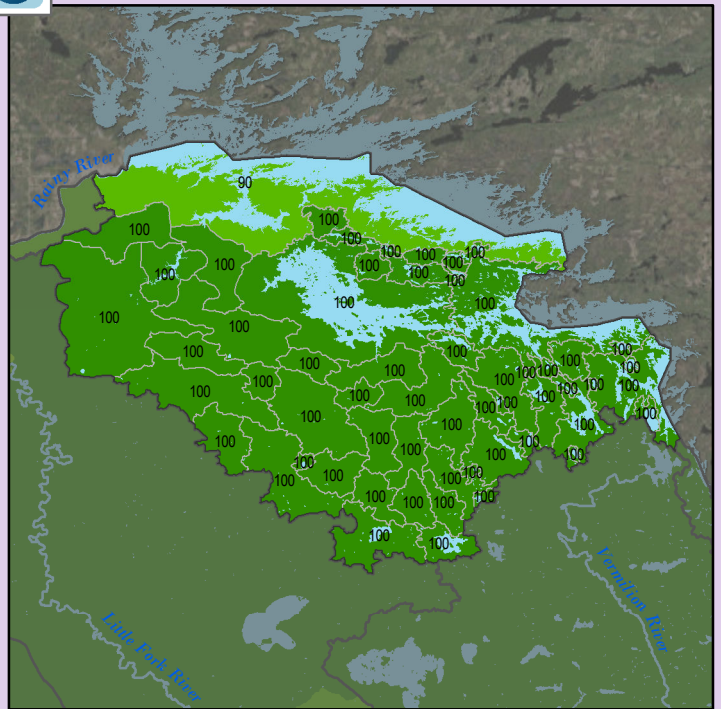
Health Score Distributions:

Rainy R-Rainy Lake

Min: 86
Max: 100
Median: 100.0
Mean: 99.22
Standard Dev: 2.13



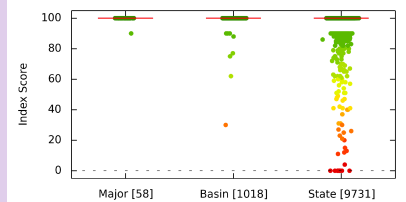
Localized Pollution Sources - Superfund Sites



Health Score Distributions:

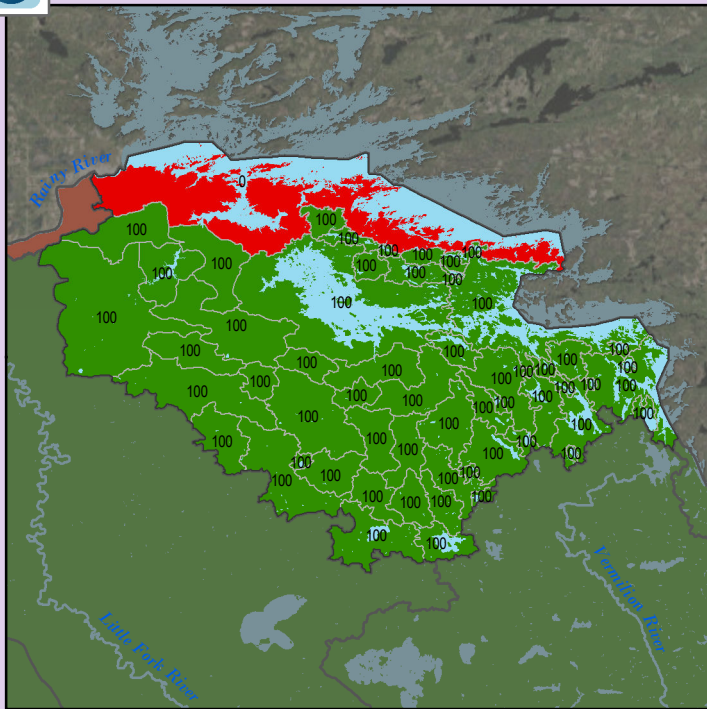
Rainy R-Rainy Lake

Min: 90
Max: 100
Median: 100.0
Mean: 99.83
Standard Dev: 1.3





Localized Pollution Sources - Wastewater Treatment



Health Score Distributions:

Rainy R-Rainy Lake

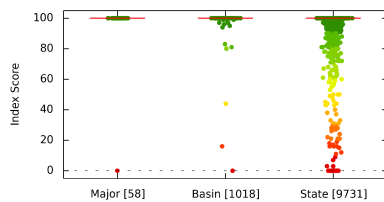
Min: 0

Max: 100

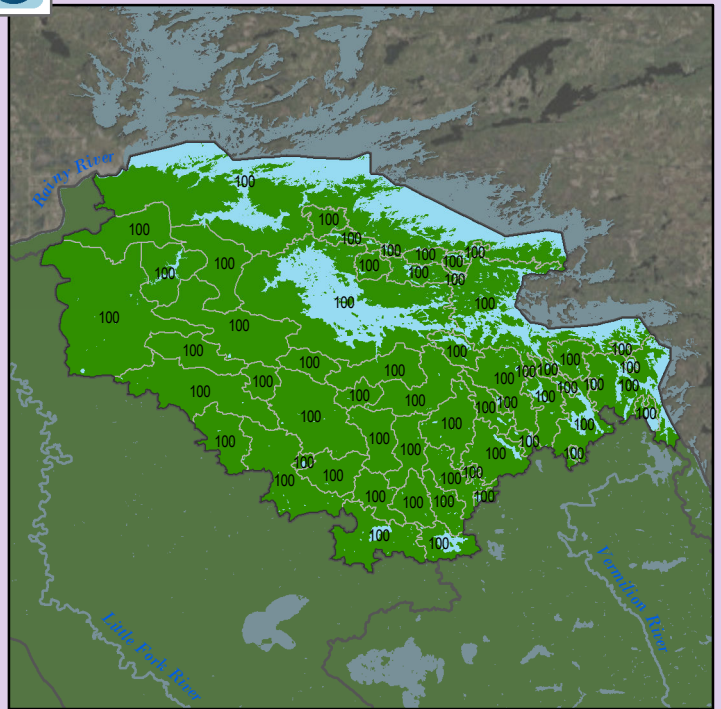
Median: 100.0

Mean: 98.28

Standard Dev: 13.02



Localized Pollution Sources - Open Pit Mines



Health Score Distributions:

Rainy R-Rainy Lake

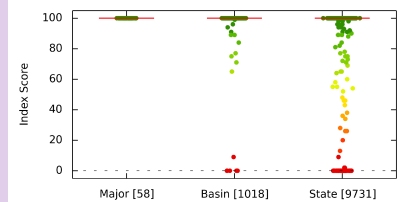
Min: 100

Max: 100

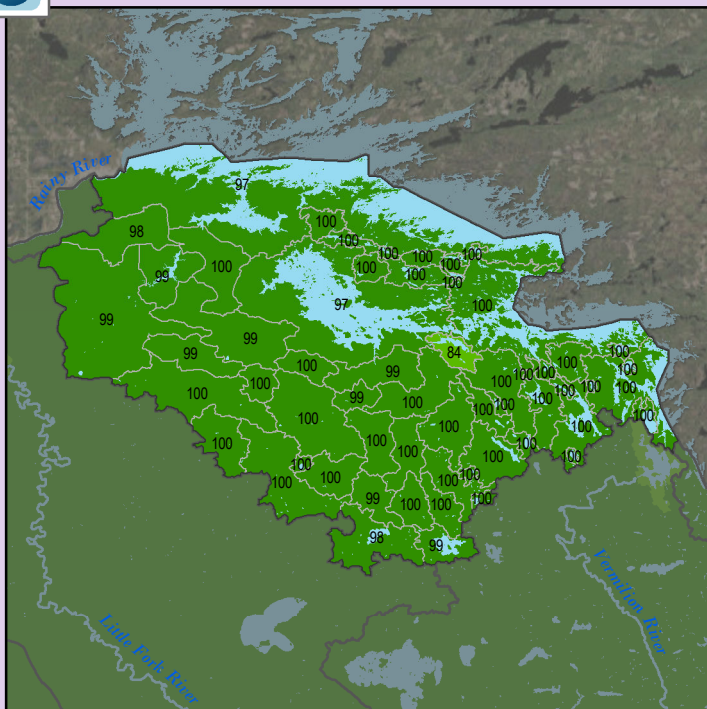
Median: 100.0

Mean: 100.0

Standard Dev: 0.0



Localized Pollution Sources - Septic Systems



Health Score Distributions:

Rainy R-Rainy Lake

Min: 84

Max: 100

Median: 100.0

Mean: 99.41

Standard Dev: 2.16

