### Watershed Report Card: Upper/Lower Red Lake

#### Watershed Area:
- **Watershed size:**
  - 1,241,690 acres
  - 1,940 square miles

- **Watershed Surface Area:**
  - Percent Land - 76 %
  - Percent Water - 24 %

#### Land Use:

<table>
<thead>
<tr>
<th>Land Cover Class</th>
<th>Percent of Watershed Area by Land Cover Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>24</td>
</tr>
<tr>
<td>Croos</td>
<td>6</td>
</tr>
<tr>
<td>Prarie/Shrub</td>
<td>1</td>
</tr>
<tr>
<td>Forest</td>
<td>18</td>
</tr>
<tr>
<td>Wetland</td>
<td>48</td>
</tr>
<tr>
<td>Developed</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Peoples and Places:

- **Watershed Population:**
  - 2000 census - 10,085
  - 2010 census - 10,784

- **Largest Cities - Population:**
  - Blackduck - 785
  - Hines - 689
  - Nebish - 290
  - Kelliher - 262
  - Langor - 213

- **Counties - % of watershed:**
  - Beltrami - 81 %
  - Koochiching - 16 %
  - Clearwater - 2 %
  - Itasca - 1 %
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.
Perennial Cover (2011)

Impervious Cover (2011)

Water Withdrawal Index

Altered Streams

Health Score Distributions:
Upper/Lower Red Lake
Min: 83
Max: 100
Median: 96.0
Mean: 95.46
Standard Dev: 3.27

Health Score Distributions:
Upper/Lower Red Lake
Min: 42
Max: 100
Median: 95.0
Mean: 92.32
Standard Dev: 9.57

Health Score Distributions:
Upper/Lower Red Lake
Min: 0
Max: 100
Median: 96.0
Mean: 79.94
Standard Dev: 31.5

Health Score Distributions:
Upper/Lower Red Lake
Min: 81
Max: 100
Median: 100.0
Mean: 99.44
Standard Dev: 2.19

September, 2015
Soil Erosion Potential

Terrestrial Habitat Quality

Stream Species Quality - Mussel Score

Stream Species Quality - Aquatic Invertebrate IBI

Health Score Distributions:
Upper/Lower Red Lake
Min: 37
Max: 100
Median: 79.0
Mean: 78.55
Standard Dev: 14.05

Health Score Distributions:
Upper/Lower Red Lake
Min: 0
Max: 100
Median: 45.0
Mean: 50.49
Standard Dev: 31.97

Health Score Distributions:
Upper/Lower Red Lake
Min: 30
Max: 66
Median: 49.5
Mean: 47.78
Standard Dev: 14.38

Health Score Distributions:
Upper/Lower Red Lake
Min: 27
Max: 72
Median: 59.0
Mean: 55.62
Standard Dev: 12.47

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Stream Species Quality - Fish IBI

Health Score Distributions:
Upper/Lower Red Lake
Min: 38
Max: 77
Median: 55.0
Mean: 55.79
Standard Dev: 9.58

Aquatic Connectivity

Health Score Distributions:
Upper/Lower Red Lake
Min: 0
Max: 100
Median: 100.0
Mean: 93.83
Standard Dev: 14.95

Riparian Connectivity

Health Score Distributions:
Upper/Lower Red Lake
Min: 86
Max: 100
Median: 97.0
Mean: 96.08
Standard Dev: 3.13

Non-Point Source - Phosphorus Risk

Health Score Distributions:
Upper/Lower Red Lake
Min: 75
Max: 100
Median: 90.0
Mean: 90.26
Standard Dev: 5.56

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Localized Pollution Sources

Health Score Distributions:
Upper/Lower Red Lake
Min: 71
Max: 100
Median: 98.0
Mean: 96.33
Standard Dev: 4.86

Localized Pollution Sources - Animal Units

Health Score Distributions:
Upper/Lower Red Lake
Min: 67
Max: 100
Median: 100.0
Mean: 97.65
Standard Dev: 5.9

Localized Pollution Sources - Potential Contaminants

Health Score Distributions:
Upper/Lower Red Lake
Min: 88
Max: 100
Median: 100.0
Mean: 99.09
Standard Dev: 2.47

Localized Pollution Sources - Superfund Sites

Health Score Distributions:
Upper/Lower Red Lake
Min: 100
Max: 100
Median: 100.0
Mean: 100.0
Standard Dev: 0.0

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