

Low

High

## Lake-stream-based Metrics

**A. Closest Lake Distance:** Network distance to the closest upstream lake.



**B. Upstream Lake Area:** Total area of upstream lakes limited to lakes that are greater than or equal to 4ha.



## Stream-based Metrics

**C. Average Link Length:** Sum of the total length of stream reaches between junctions divided by the total number of reaches.



**D. Stream Density:** the length of all streams (minus artificial lines through lakes) divided by the area of watershed.



**E. Stream Order Ratio:** The total number of first order stream reaches divided by the total number of higher order stream reaches. In this example the lower value lake has a stream order ratio of 2 whereas the higher value lake has a stream order ratio of 3.

