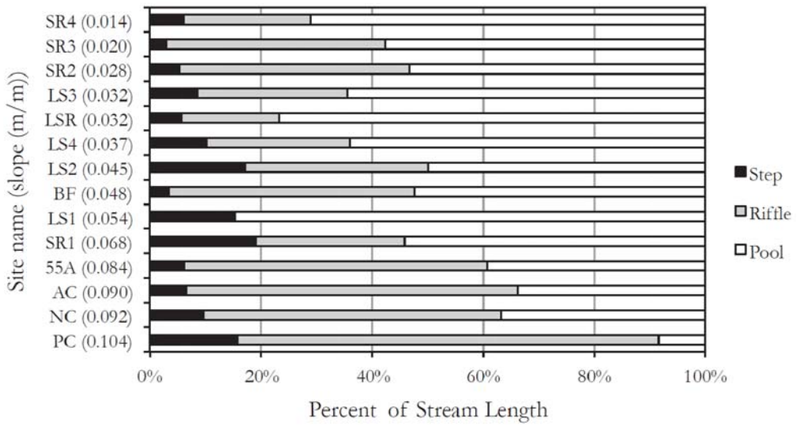


FIGURE 4. Percent of Length Occupied by Steps, Riffles, and Pools. Sites listed in order of increasing slope.

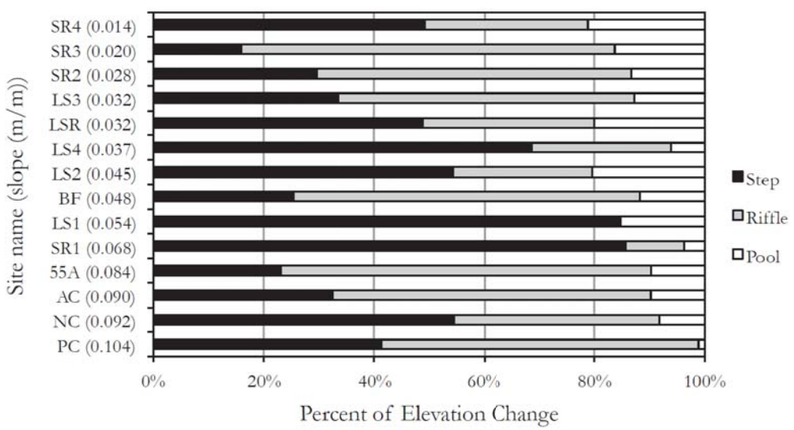


FIGURE 5. Percent of Elevation Drop Over Steps, Riffles, and Pools. Sites listed in order of increasing slope.

TABLE 3. Selected Dimensionless Ratios.

| Site Name | Step Height Ratio | Riffle Slope Ratio | Riffle Length Ratio | Pool Length Ratio | Pool Spacing Ratio |
|---|---|---|---|---|---|
| SR4 | 0.01 (0.00-0.01) | 1.3 (1.1-1.6) | 0.6 (0.3-1.2) | 0.5 (0.0-1.3) | 0.6 (0.1-0.7) |
| SR3 | 0.01 (0.01-0.03) | 1.8 (1.0-2.2) | 0.9 (0.2-2.4) | 1.0 (0.4-2.1) | 1.8 (0.7-3.0) |
| SR2 | 0.04 (0.01-0.08) | 1.5 (1.0-2.0) | 0.9 (0.4-2.0) | 0.9 (0.5-1.7) | 1.8 (0.9-3.1) |
| LS3 | 0.02 (0.02-0.02) | 1.9 (1.7-2.1) | 0.5 (0.3-0.8) | 0.6 (0.3-1.3) | 1.1 (0.6-2.0) |
| LSR | 0.02 (0.01-0.03) | 1.6 (1.4-2.0) | 0.4 (0.1-0.8) | 0.6 (0.2-1.0) | 0.8 (0.3-1.7) |
| LS4 | 0.02 (0.00-0.03) | 1.0 (0.6-1.6) | 0.6 (0.2-1.0) | 0.4 (0.0-1.7) | 0.6 (0.1-2.8) |
| LS2 | 0.04 (0.02-0.05) | 0.8 (0.7-1.0) | 1.3 (0.8-1.7) | 1.0 (0.4-1.3) | 2.1 (0.6-4.3) |
| BF | 0.04 (0.03-0.06) | 1.6 (0.8-2.5) | 0.7 (0.4-1.3) | 0.9 (0.4-1.2) | 1.6 (0.9-2.2) |
| LS1 | 0.04 (0.02-0.07) | No riffles | No riffles | 0.8 (0.5-1.2) | 1.0 (0.7-1.4) |
| SR1 | 0.07 (0.01-0.20) | 0.4 (0.2-0.5) | 1.0 (0.5-1.7) | 0.7 (0.3-1.4) | 1.3 (0.5-2.5) |
| 55A | 0.08 (0.07-0.09) | 1.2 (1.0-1.3) | 3.3 (1.6-5.0) | 1.0 (0.3-2.1) | 2.8 (0.6-7.1) |
| AC | 0.08 (0.06-0.09) | 1.1 (0.8-1.5) | 0.8 (0.2-1.7) | 0.7 (0.5-0.8) | 2.0 (1.2-3.1) |
| NC | 0.09 (0.05-0.13) | 0.7 (0.6-0.9) | 1.5 (0.6-2.9) | 0.7 (0.2-1.1) | 1.9 (0.4-5.4) |
| PC | 0.10 (0.05-0.17) | 0.8 (0.5-1.2) | 1.5 (0.5-3.4) | 0.2 (0.1-0.4) | 1.3 (1.2-1.4) |

Notes: Means reported, with range in parentheses. Sites listed in order of increasing slope. See Table 1 for full site names.

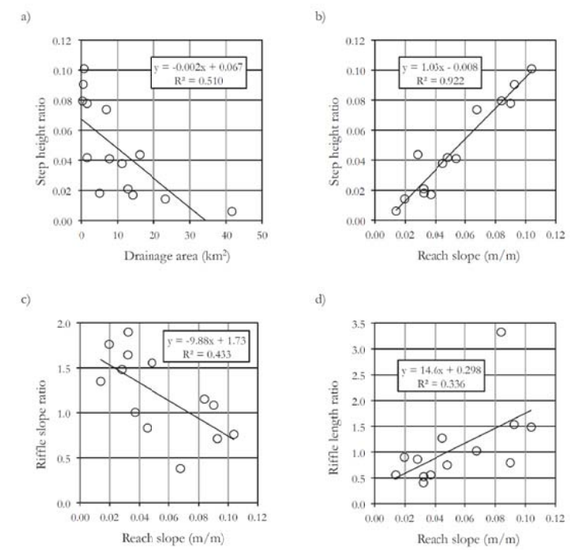


FIGURE 6. Correlations Between Selected Morphological Variables; All Significant at $p < 0.05$: Step Height Ratio and Drainage Area (a); Step Height Ratio and Reach Slope (b); Riffle Slope Ratio and Reach Slope (c); and Riffle Length Ratio and Reach Slope (d).

From: Zink, Jason M., Gregory D. Jennings, and G.Alexander Price, 2012. Morphology Characteristics of Southern Appalachian Wilderness Streams. Journal of the American Water Resources Association (JAWRA) 1-11. DOI: 10.1111/j.1752-1688.2012.00647.x.

**CONCEPTUAL INFORMATION ONLY - NOT FOR CONSTRUCTION**

Zink Environmental, PLLC
129 Norwood Ave, Asheville, NC 28804
828-273-8322 | jmzink@gmail.com

REFERENCE DATA
LONGITUDINAL PROFILE

Designed By: JMZ | Date: October 23, 2015 | Scale: NOT TO SCALE

Little River Restoration Master Plan
DuPont State Recreational Forest
Transylvania and Henderson Counties, North Carolina

Sheet G7