

# New Mexico Watershed Watch Riparian Survey (v.2010)

Project name & River / Wetland Name:

Date:

## Surveyors:

Rate each of the parameters on a scale of 0 to 4. Assign scores based on the characteristics described in the Poor, Fair, Good, Excellent columns. Use scores in the parenthesis that are in the middle of the range if the characteristics clearly represent the descriptions. For example, a riparian area with < 3 height classes would be given a 3.5 score.

Parameter	Optimal	Sub-optimal	Fair	Poor	Score	Notes
	4	3	2	1		
1 Riparian Vegetation structural diversity	> 3 height classes grass/shrub/tree	2 height classes mostly trees	1 height class grass/forbs	1 height class sparse vegetation		Difference between left and right side (as you face downstream)
2 Lower Bank Stability	stable no erosion	some erosion	unstable/ erosion	unstable/eroding		Difference between left and right side (as you face downstream)
3 Vegetation Abundance/cover	Plant cover is >75%	Plant cover is 50 - 74%	Plant cover is 25 - 49%	Plant cover is less than 25%		Difference between left and right side (as you face downstream)
4 Vegetation Buffer Width meters (feet)	>18 m (60 ft) on least Buffered side--->	12 -18 m (40 - 60) ----->	6 -12 m (20-40) ----->	< 6 m (20) ----->		Measure the average width of the riparian vegetation from the stream side to the nearest disruption. (Name the disruption here and note on river corridor land use)
5 Vegetation Diversity	> 20 plant species	15-19 plant species	5-14 plant species	0-5 plant species		
6 Embeddedness	substrate surrounded by <25% fine sediment	25 - 50%	50 - 75%	>75%		
7 Flow m3/sec (cfs) COLD -> ----- WARM ->	> 0.05 (2 cfs) ----- > 0.15 (5 cfs)	0.03 - 0.05 (1-2) ----- 0.05 - 0.15 (2-5)	0.01 - 0.03 (0.5 - 1) ----- 0.03 - 0.05	<0.01 -----		
8 Canopy shading the water	mixed sun and shade	sparse canopy filtered light	nearly complete sun or shade	no shade complete sun		
9 Benthic insects	mayflies, stoneflies, caddisflies (dominant)	mayflies & caddis (dominant)	mainly midges mayflies or caddisflies	mainly midges & other, no stone, no caddis, no may		
10 Width to depth ratio of lower bank	ratio <7	ratio = 8 -15	ratio = 15 - 25 over bank flow	ratio > 25 peak not contained		Measure capacity of lower bank to contain peak flows. Divide average top width of lower bank by height of lower bank
11 Pools & riffles	ratio = 5 to 7 high variety of habitats	ratio = 7 - 15	ratio = 15 - 25	ratio > 25 a straight stream or one with low habitat variety		Divide average distance between riffles or bends (for low gradient streams) by the average stream width
12 Streambed geology	>50% boulders, cobbles, gravel, or logs	25-50% boulders, cobbles, gravel, or logs	10-25% boulder cobbles, gravel, or logs	< 10% boulders, cobbles, gravel, or logs		
Divide total score by number of parameters measured				Average Score:		

# NM WATERSHED WATCH RIPARIAN SURVEY BACKGROUND INFORMATION

**General information:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Elevation: \_\_\_\_\_

Stream name: \_\_\_\_\_

Investigators conducting survey: \_\_\_\_\_

Weather		
Past		
Now	48 Hours	
<input type="checkbox"/>	<input type="checkbox"/>	Clear/Sunny
<input type="checkbox"/>	<input type="checkbox"/>	Overcast
<input type="checkbox"/>	<input type="checkbox"/>	Showers
<input type="checkbox"/>	<input type="checkbox"/>	Rain (steady rain)
<input type="checkbox"/>	<input type="checkbox"/>	Storm (heavy rain)

Site & Vegetation type description: \_\_\_\_\_

**River corridor land uses:** Place "D" for dominant and "X" if present - otherwise leave blank. Use blank spaces for land uses not listed.

Roadless area	<input type="checkbox"/>	Cropland	<input type="checkbox"/>	Golf course	<input type="checkbox"/>	Urban	<input type="checkbox"/>
Wooded area w/ roads	<input type="checkbox"/>	Grazed pasture	<input type="checkbox"/>	Recreation area	<input type="checkbox"/>	Commerical/Industrial	<input type="checkbox"/>
Wooded Logging area	<input type="checkbox"/>	Ungrazed grassland	<input type="checkbox"/>	Scattered residential	<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Reservoir or irrigation above? (Y/N) \_\_\_\_\_

**Sketch of site:** Draw a "bird's eye" view of the 100' segment of the river that includes benthic macroinvertebrate sampling sites (if done). Note the places where water flow was measured. Also note land uses and landscape features such as direction of water flow, roads, wetlands, ditches, pastures, corrals, grazed areas, trails, or homes.