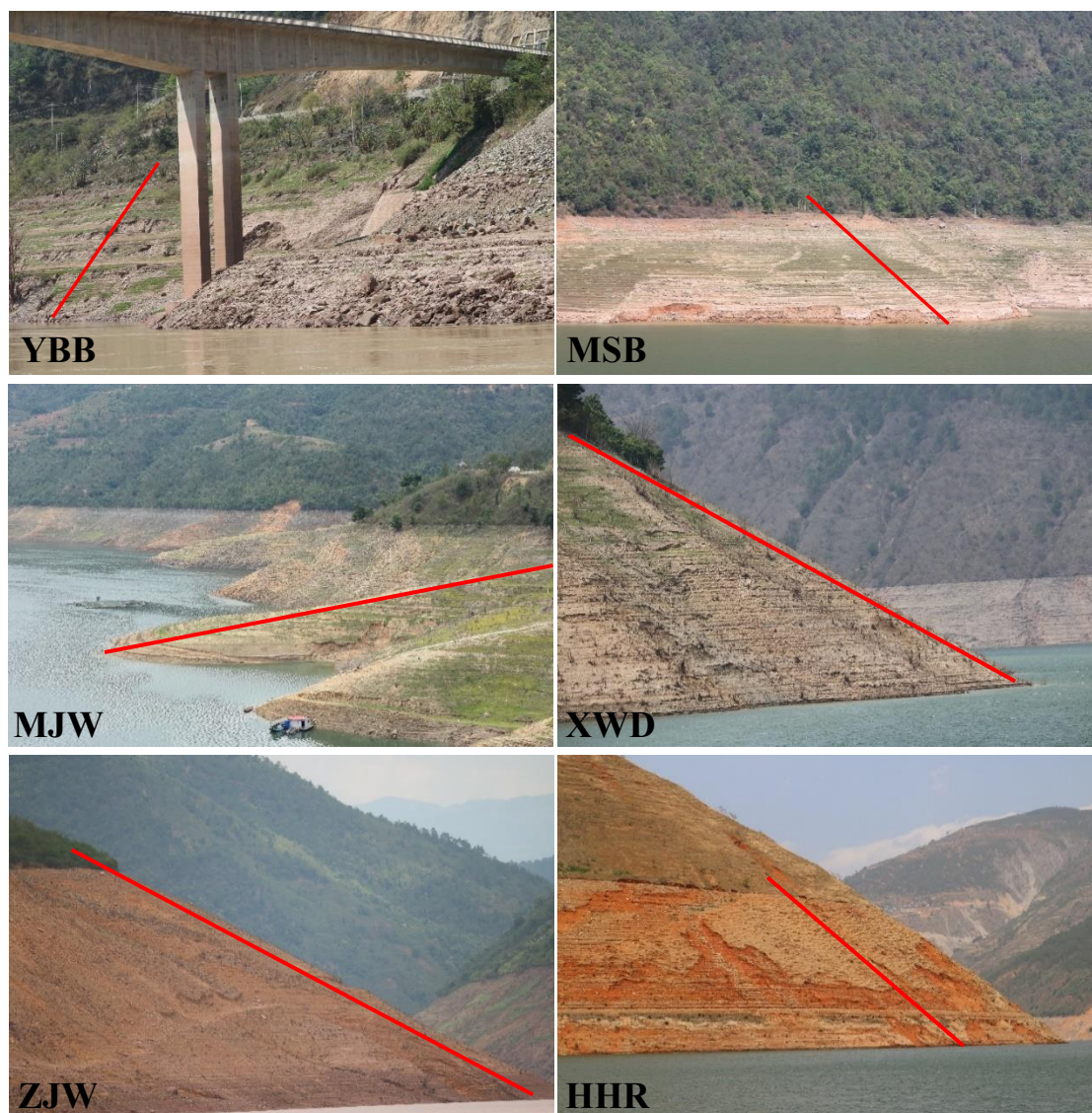


## Supplementary Materials



**Figure S1.** The riparian soils sampling locations of Xiaowan Reservoir

**Table S1.** The statistics of the heavy metal concentrations in the riparian soils of XWR.

Element (mg/kg)	As	Cd	Cr	Cu	Hg	Ni	Pb	Zn
<b>(a) YBB (<i>n</i> = 6)</b>								
Maximum	8.30	0.09	71.00	49.40	0.03	45.90	14.70	62.00
Minimum	2.00	0.05	57.00	39.20	0.01	37.80	8.90	36.00
Mean*	5.08 ± 0.81 <sup>c</sup>	0.07 ± 0.00 <sup>a</sup>	<b>67.00 ± 1.89<sup>ac</sup></b>	<b>43.72 ± 1.39<sup>a</sup></b>	0.02 ± 0.00 <sup>b</sup>	<b>42.08 ± 1.10<sup>ab</sup></b>	11.57 ± 0.85 <sup>f</sup>	51.00 ± 3.38 <sup>e</sup>
Std. D	1.98	0.01	4.62	3.42	0.01	2.68	2.07	8.29
<b>IRZ</b>	6.6	0.054	57	39.2	0.03	44.5	12.7	49
<b>(b) MSB (<i>n</i> = 10)</b>								
Maximum	3.20	0.14	41.00	16.00	0.03	13.70	23.80	98.00
Minimum	1.70	0.07	29.00	9.50	0.01	7.90	20.90	67.00
Mean*	2.53 ± 0.15 <sup>cf</sup>	0.10 ± 0.00 <sup>f</sup>	33.50 ± 1.13 <sup>e</sup>	12.71 ± 0.66 <sup>bc</sup>	0.02 ± 0.00 <sup>b</sup>	10.70 ± 0.49 <sup>f</sup>	22.09 ± 0.27 <sup>bc</sup>	<b>81.60 ± 3.24<sup>ab</sup></b>
Std. D	0.48	0.02	3.58	2.10	0.01	1.55	0.86	10.24
<b>IRZ</b>	2.8	0.07	32	10.3	0.02	11.5	21.8	69
<b>(c) MJW (<i>n</i> = 14)</b>								
Maximum	29.40	0.07	91.50	28.70	0.05	40.10	56.70	116.50
Minimum	6.10	0.02	37.00	8.10	0.01	17.60	32.10	48.00
Mean*	<b>12.69 ± 1.75<sup>b</sup></b>	0.03 ± 0.00 <sup>e</sup>	<b>69.79 ± 4.85<sup>ab</sup></b>	15.44 ± 1.48 <sup>bd</sup>	0.02 ± 0.00 <sup>b</sup>	30.66 ± 1.97 <sup>cd</sup>	<b>39.43 ± 1.49<sup>a</sup></b>	72.14 ± 4.82 <sup>ad</sup>
Std. D	6.55	0.01	18.17	5.53	0.01	7.36	5.59	18.04
<b>IRZ</b>	17.7	0.07	82	22.4	0.02	38	39.1	97
<b>(d) XWD (<i>n</i> = 14)</b>								
Maximum	3.80	0.08	66.00	9.60	0.03	31.50	9.60	40.00
Minimum	1.70	0.02	48.00	2.40	0.01	17.30	7.00	19.00
Mean <sup>a</sup>	2.46 ± 0.15 <sup>ce</sup>	0.04 ± 0.00 <sup>a</sup>	55.79 ± 1.12 <sup>cd</sup>	4.83 ± 0.51 <sup>f</sup>	0.02 ± 0.00 <sup>b</sup>	23.61 ± 0.85 <sup>e</sup>	8.06 ± 0.19	25.07 ± 1.65 <sup>f</sup>
Std. D	0.55	0.02	4.19	1.90	0.01	3.19	0.72	6.16
<b>IRZ</b>	2.7	0.03	48	9.6	0.01	17.3	7.3	27
<b>(e) ZJW (<i>n</i> = 14)</b>								
Maximum	58.50	0.25	73.00	22.20	0.30	37.40	34.40	134.00
Minimum	37.10	0.02	48.00	15.40	0.05	24.80	17.10	50.00
Mean*	<b>49.21 ± 1.50<sup>a</sup></b>	0.06 ± 0.01 <sup>a</sup>	56.07 ± 1.75 <sup>c</sup>	18.66 ± 0.56 <sup>bc</sup>	<b>0.13 ± 0.02<sup>a</sup></b>	30.81 ± 0.95 <sup>c</sup>	23.01 ± 1.11 <sup>b</sup>	74.36 ± 5.85 <sup>ac</sup>
Std. D	5.61	0.06	6.54	2.10	0.09	3.54	4.17	21.89
<b>IRZ</b>	37.1	0.02	56	18.6	0.06	25.8	17.6	52
<b>(f) HHR (<i>n</i> = 14)</b>								
Maximum	4.80	0.09	96.00	30.30	0.03	55.40	27.40	100.00
Minimum	2.90	0.02	74.00	16.20	0.02	33.60	17.60	74.00
Mean*	3.69 ± 0.17 <sup>cd</sup>	0.05 ± 0.01 <sup>a</sup>	<b>89.57 ± 1.34<sup>a</sup></b>	23.57 ± 1.21 <sup>b</sup>	0.02 ± 0.00 <sup>b</sup>	<b>44.84 ± 1.41<sup>a</sup></b>	20.81 ± 0.65 <sup>bd</sup>	<b>86.79 ± 2.44<sup>a</sup></b>
Std. D	0.63	0.02	5.02	4.52	0.00	5.27	2.44	9.13
<b>IRZ</b>	3.516.96	0.0541.92	945.61	30.319.16	0.0216.33	47.811.74	27.411.72	10010.52

\* Represented as a mean ± standard error. Data in the bold text indicates the exceeded the background value of Yunnan Province. Small letters in the upper right of “Mean\*” value represent the significant difference of trace metals concertation along different sampling sections