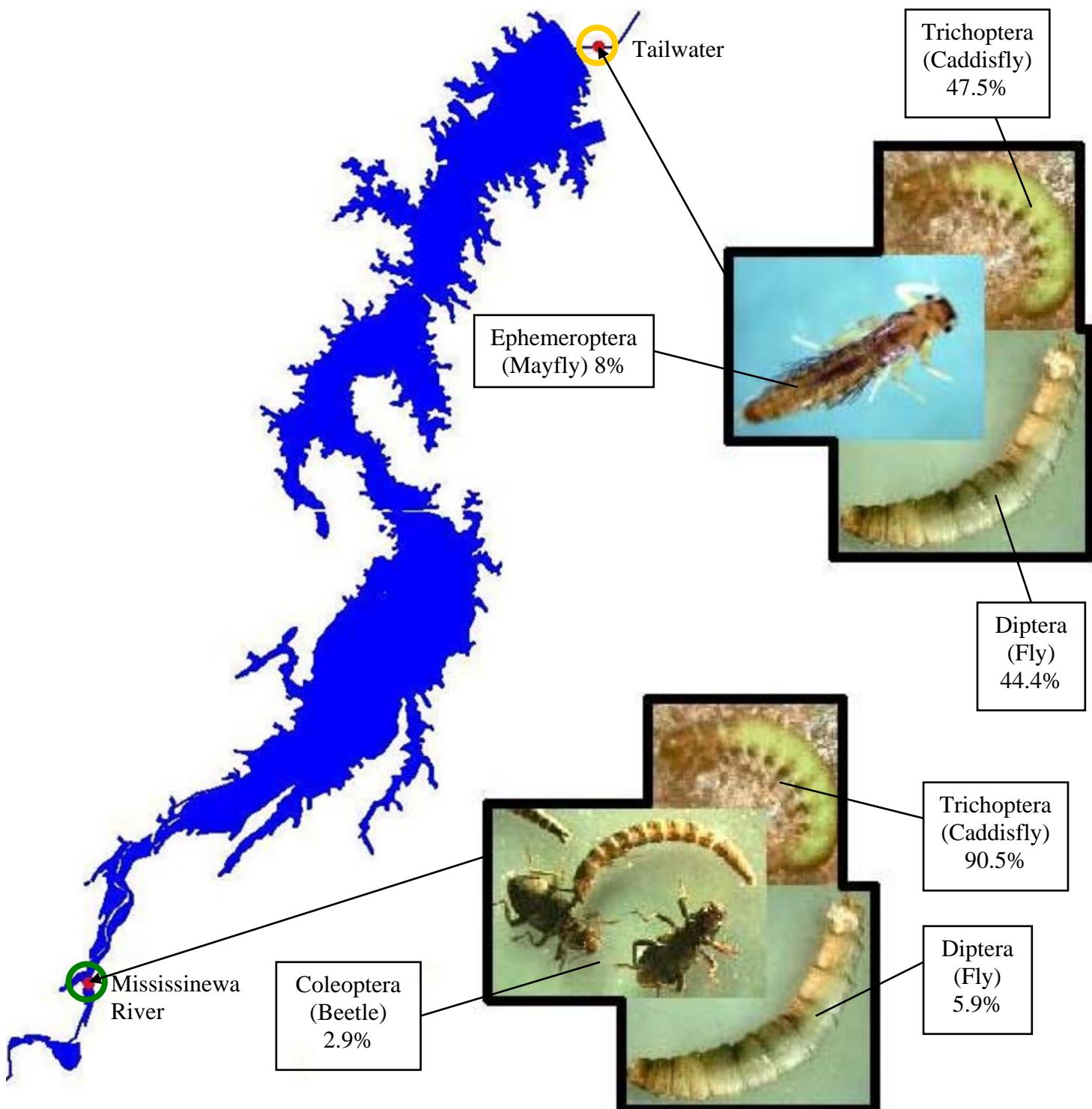


Aquatic Insects' Community Structure  
Mississinewa Lake Analysis  
August 23-24, 2004

Relative abundance of dominant taxa found at each of the sites shown below.



COMMUNITY METRICS *	Mississinewa Lake	
	Tailwater	Mississinewa
Collection Date	8/24/04	8/23/04
Total Number of Taxa	27	27
% Contribution of Dominant Taxa	86	95
Modified Hilsenhoff Biotic Index (0, good – 10, bad)	5.43	4.28
Shannon-Wiener Index	1.95	1.22
Number of Ephemeroptera Taxa	3	5
% Ephemeroptera Taxa (Abundance)	7	1
Number of Plecoptera Taxa	0	0
% Plecoptera Taxa (Abundance)	0	0
Number of Trichoptera Taxa	4	4
% Trichoptera Taxa (Abundance)	40	89
Number of EPT Taxa	7	9
% EPT Taxa	26	33
Number of Dipteran Taxa	13	9
% Dipteran Taxa	36	6
Number of Chironomid Taxa	11	7
% Chironomid Taxa	36	6
Number of Tanytarsini Taxa	1	1
% Tanytarsini Taxa	2	0
Number of Orthocladiinae Taxa	4	2
% Orthocladiinae Taxa	2	0
% Cricotopus + Chironomus/Total Chiron.	1	1
Number of Dipteran Taxa – Tanytarsini and other Non-Insect Taxa	17	14
% Dipteran Taxa - Tanytarsini and other Non-Insect Taxa	51	7
Ratio of EPT to Chiron. Abundance	1	16
Percent Tolerant Organisms	2	1
Numbers of Individuals / m <sup>2</sup>	14,770	29,784
* Based on 4 replicate surber samples Substrate sampled – small stones		

### 5 Most Abundant Taxa on the Tailwater

- Cheumatopsyche sp. (Trichoptera) 40.1%
- Polypedilum flavum (Diptera) 32.1%
- Tricorythodes sp. (Ephemeroptera) 7.9%
- Hydroptilidae gen. sp. (Trichoptera) 5.2%
- Rheotanytarsus exiguus group sp. (Diptera) 2.7%

### 5 Most Abundant Taxa on Mississinewa R.

- Ceratopsyche morosa group sp.(Trichoptera) 50.9%
- Cheumatopsyche sp. (Trichoptera) 39.3%
- Polypedilum flavum (Diptera) 4%
- Stenelmis sp. (Coleoptera) 2.9%
- Glyptotendipes sp. (Diptera) 0.9%