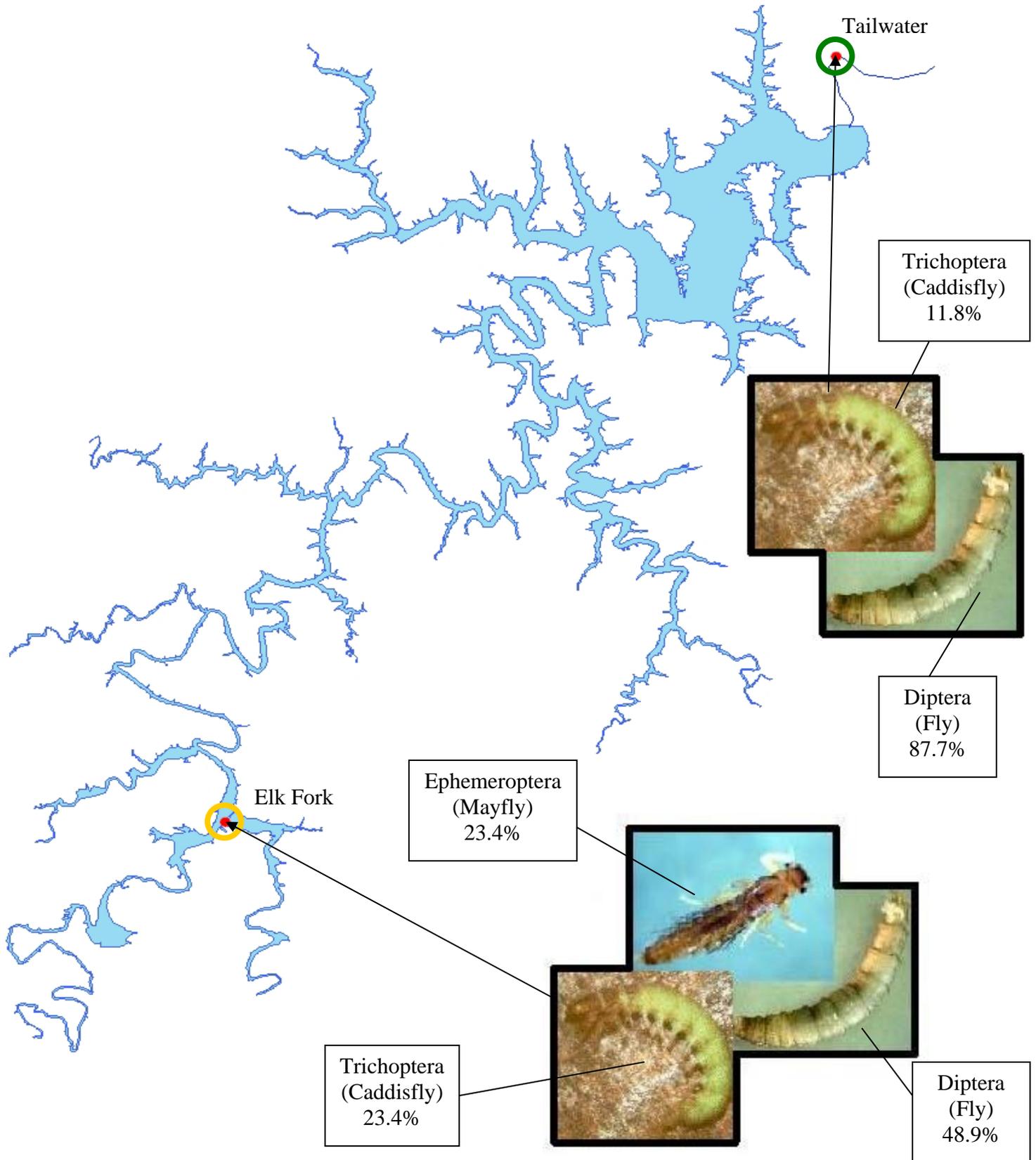


Aquatic Insects' Community Structure  
Cave Run Lake Analysis  
September 7, 2004

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



COMMUNITY METRICS *	Cave Run	
	Tailwater	Elk Fork
Collection Date	9/7/04	9/7/04
Total Number of Taxa	15	17
% Contribution of Dominant Taxa	98	60
Modified Hilsenhoff Biotic Index (0, good – 10, bad)	5.96	5.43
Shannon-Wiener Index	1.23	2.60
Number of Ephemeroptera Taxa	2	3
% Ephemeroptera Taxa (Abundance)	0	20
Number of Plecoptera Taxa	0	0
% Plecoptera Taxa (Abundance)	0	0
Number of Trichoptera Taxa	4	1
% Trichoptera Taxa (Abundance)	12	20
Number of EPT Taxa	6	4
% EPT Taxa	12	40
Number of Dipteran Taxa	4	8
% Dipteran Taxa	86	42
Number of Chironomid Taxa	3	7
% Chironomid Taxa	78	29
Number of Tanytarsini Taxa	1	1
% Tanytarsini Taxa	60	9
Number of Orthoclaadiinae Taxa	1	3
% Orthoclaadiinae Taxa	1	5
% Cricotopus + Chironomus/Total Chiron.	1	13
Number of Dipteran Taxa – Tanytarsini and other Non-Insect Taxa	5	10
% Dipteran Taxa - Tanytarsini and other Non-Insect Taxa	28	47
Ratio of EPT to Chiron. Abundance	0.15	1.38
Percent Tolerant Organisms	0	7
Numbers of Individuals / m <sup>2</sup>	27,341	149
* Based on 4 replicate surber samples Substrate sampled – small stones		

### 5 Most Abundant Taxa at Tailwater

1. Rheotanytarsus exiguus group sp. (Diptera) 61.1%
2. Polypedilum flavum sp. (Diptera) 16.6%
3. Cheumatopsyche sp. (Trichoptera) 11.7%
4. Simulium sp. (Diptera) 8.6%
5. Cricotopus / Orthocladius sp. (Diptera) 1%

### 5 Most Abundant Taxa on Elk Fork

1. Cheumatopsyche sp. (Trichoptera) 21.3%
2. Simulium sp. (Diptera) 14.9%
3. Baetis intercalaris (Ephemeroptera) 14.9%
4. Rheotanytarsus exiguus group sp. (Diptera) 10.6%
5. Polypedilum aviceps (Diptera) 8.5%