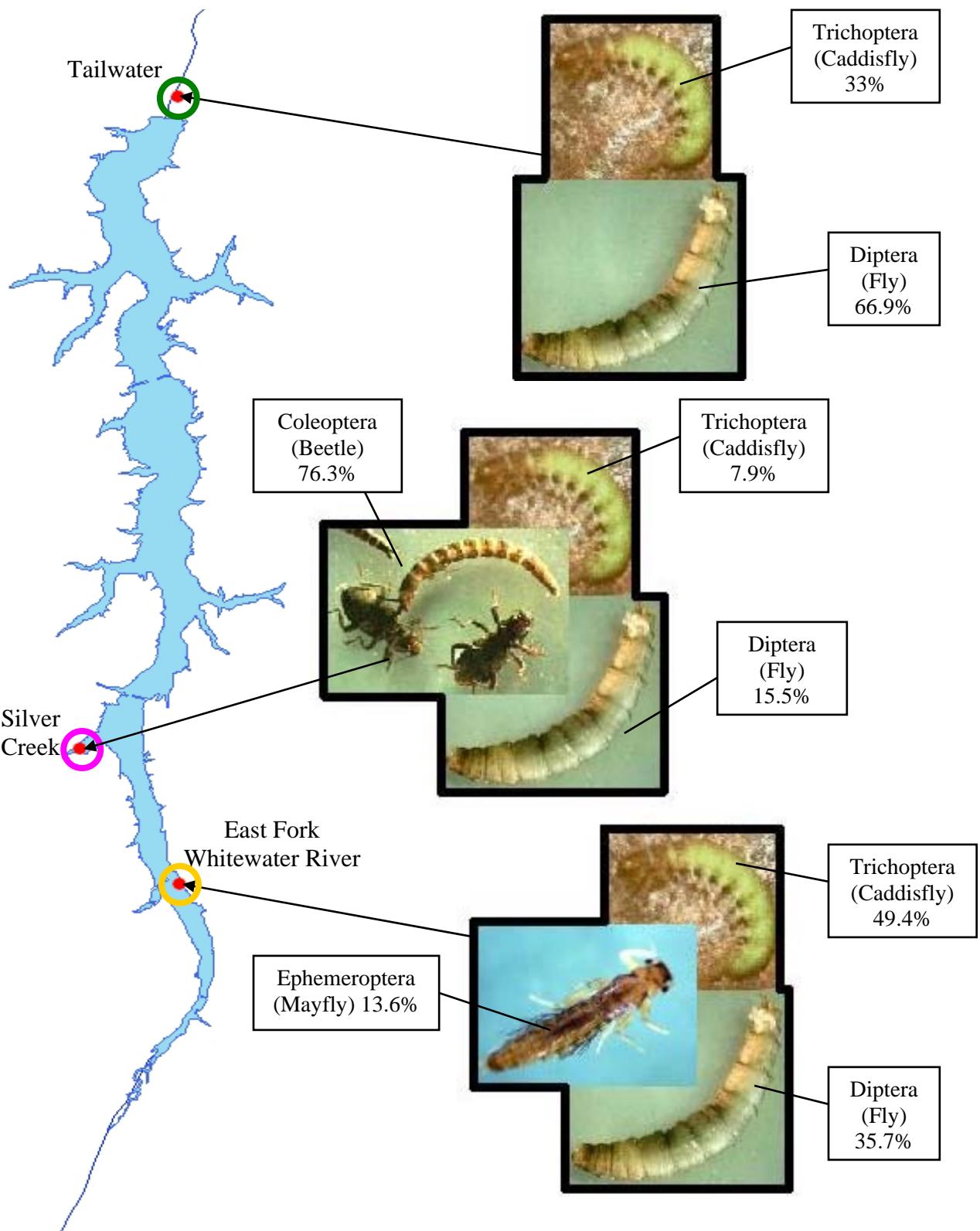


Aquatic Insects' Community Structure
Brookville Lake Analysis
August 24, 25 & 30, 2004

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



Community Metrics *	Brookville Lake		
	Tail water	White water	Silver Creek
Collection Date	8/30/04	8/25/04	8/24/04
Total Number of Taxa	18	30	21
% Contribution of Dominant Taxa	92	86	98
Modified Hilsenhoff Biotic Index (0, good – 10, bad)	5.58	4.71	4.86
Shannon-Wiener Index	1.99	1.98	1.41
Number of Ephemeroptera Taxa	1	8	2
% Ephemeroptera Taxa (Abundance)	0	14	0
Number of Plecoptera Taxa	0	0	0
% Plecoptera Taxa (Abundance)	0	0	0
Number of Trichoptera Taxa	5	4	4
% Trichoptera Taxa (Abundance)	32	49	5
Number of EPT Taxa	6	12	6
% EPT Taxa	32	63	5
Number of Dipteran Taxa	8	15	6
% Dipteran Taxa	65	36	10
Number of Chironomid Taxa	6	11	4
% Chironomid Taxa	65	34	1
Number of Tanytarsini Taxa	1	1	1
% Tanytarsini Taxa	39	3	1
Number of Orthocladiinae Taxa	4	5	2
% Orthocladiinae Taxa	14	29	0
% Cricotopus + Chironomus/Total Chiron.	2	9	3
Number of Dipteran Taxa – Tanytarsini and other Non-Insect Taxa	11	15	10
% Dipteran Taxa - Tanytarsini and other Non-Insect Taxa	28	33	43
Ratio of EPT to Chiron. Abundance	0.50	1.87	6.09
Percent Tolerant Organisms	1	0	0
Numbers of Individuals / m ²	36,357	4,419	21,719

* Based on 4 replicate surber samples
 Substrate sampled – small stones

5 Most Abundant Taxa at Tailwater

1. Rheotanytarsus exiguus group sp. (Diptera) 40.4%
2. Ceratopsyche morosa group sp. (Trichoptera) 23.9%
3. Polypedilum flavum sp. (Diptera) 11.4%
4. Cardiocladius obscurus (Diptera) 10.3%
5. Cheumatopsyche sp. (Trichoptera) 8.1%

5 Most Abundant Taxa on East Fork Whitewater R

1. Ceratopsyche morosa group sp. (Trichoptera) 33.7%
2. Cardiocladius obscurus (Diptera) 25.8%
3. Cheumatopsyche sp. (Trichoptera) 15.3%
4. Baetis intercalaris (Ephemeroptera) 8.3%
5. Acentrella ampla (Ephemeroptera) 3.5%

5 Most Abundant Taxa on Silver Creek

1. Stenelmis sp. (Coleoptera) 76.3%
2. Simulium sp. (Diptera) 14.2%
3. Hydropsyche betteni (Trichoptera) 7.2%
4. Rheotanytarsus exiguus group sp. (Diptera) 1.2%
5. Cheumatopsyche sp. (Trichoptera) 0.6%