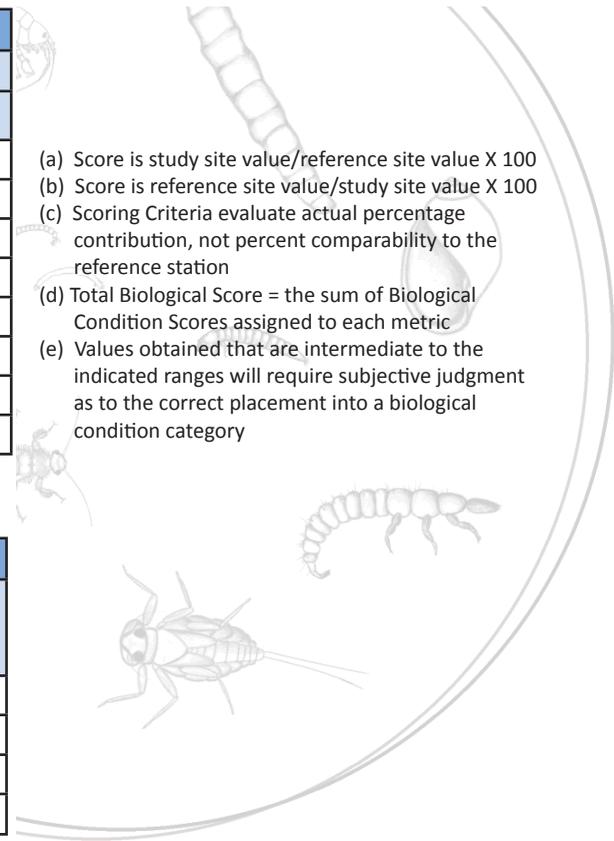


Table 5. Summary of Criteria Used to Classify the Biological Conditions of Sample Sites

SAMPLING AND ANALYSIS				
TOTAL BIOLOGICAL SCORE DETERMINATION				
Metric	Biological Condition Scoring Criteria			
	6	4	2	0
1. Taxonomic Richness (a)	> 80%	79-60%	59-40%	< 40%
2. Shannon Diversity Index (a)	> 75%	74-50%	49-25%	< 25%
3. Hilsenhoff Biotic Index (b)	> 85%	84-70%	69-50%	< 50%
4. EPT Index (a)	> 90%	89-80%	79-70%	< 70%
5. Percent Ephemeroptera (c)	> 25%	10-25%	1-9%	< 1%
6. Percent Dominant Taxa (c)	< 20%	20-30%	31-40%	> 40%
7. Percent Chironomidae (c)	< 5%	5-20%	21-35%	> 35%
Total Biological Score (d)				

BIOASSESSMENT	
Percent Comparability of Study and Reference Condition Total Biological Scores (e)	Biological Condition Category
> 83%	Nonimpaired
79-54	Slightly Impaired
50-21	Moderately Impaired
< 17%	Severely Impaired

- (a) Score is study site value/reference site value X 100
- (b) Score is reference site value/study site value X 100
- (c) Scoring Criteria evaluate actual percentage contribution, not percent comparability to the reference station
- (d) Total Biological Score = the sum of Biological Condition Scores assigned to each metric
- (e) Values obtained that are intermediate to the indicated ranges will require subjective judgment as to the correct placement into a biological condition category



RESULTS

Water Quality

In September 2010, the water quality at most of the sampling sites met water quality standards. Only 3.4 percent (13 of 384) of water quality values exceeded their respective limits. The majority of the exceedances were for total sodium. Exceedances are summarized in Table 6 and Figure 2.

Table 6. Number of Exceeds per Parameter

Parameter	Limit	Number of Exceedances
Total Sodium	> 20 mg/l	10
Total Orthophosphate	> 0.02 mg/l	2
Total Phosphorus	> 0.1 mg/l	1

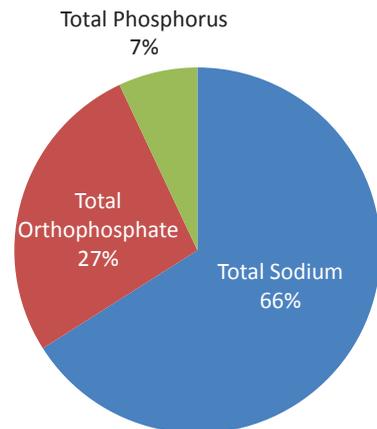


Figure 2. Parameters Exceeding Water Quality Standards or Recommended Life Tolerances

Biological Conditions

Biological conditions are summarized in Figure 3. Nonimpaired biological conditions were found at three of the 16 sites (19 percent), slightly impaired conditions

were found at nine sites (56 percent), and moderately impaired conditions were found at four sites (25 percent). No sites were rated as severely impaired.

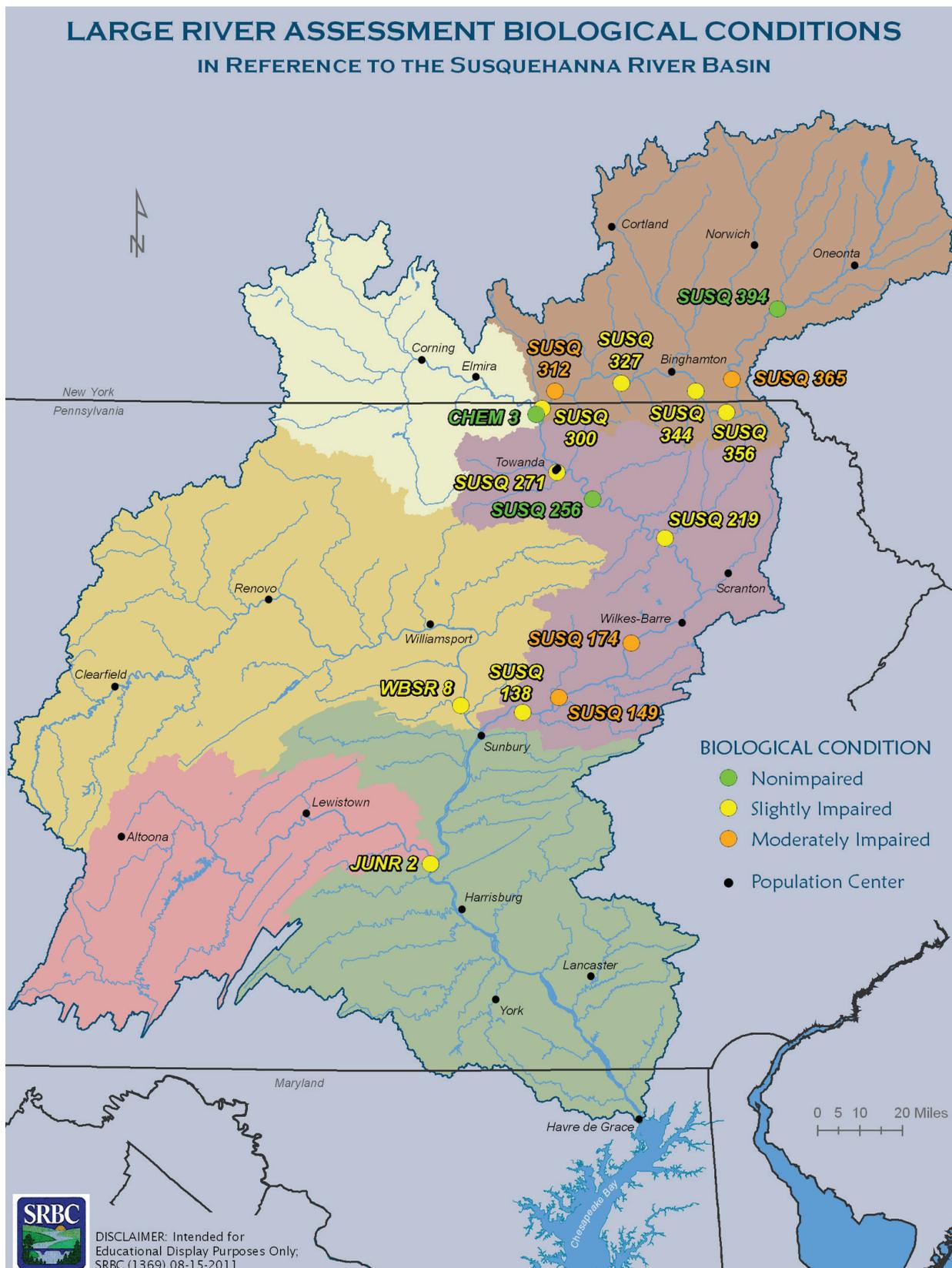


Figure 3. Biological Conditions in 2009