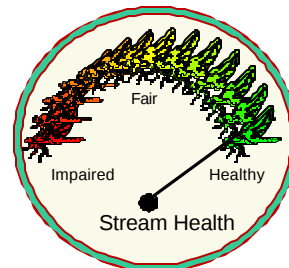




# EcoSummary

Harvey Creek

02/24/98



## Background

Since 1992, minimally disturbed reference streams have been sampled throughout Florida for the purpose of establishing biological community expectations and identifying specific thresholds for assessing stream health. The Stream Condition Index (SCI) has been the primary assessment method, which consists of collecting 20 D-frame dipnet sweeps (0.5 m in length) of the most productive habitats in a 100 m reach of stream. The organisms are sub-sampled, sorted, and identified to the lowest practical taxonomic level. Seven measurements of invertebrate health are calculated and compared with the expectations established by the reference site sampling. While similar to the SCI, the BioRecon procedure consists of 4 dipnet sweeps, field sorting, and identification of all taxa except for worms, midges, and water mites. BioRecon thresholds have been established for taxa richness, the EPT Index, and the Florida Index. Reference streams are sampled by both SCI and BioRecon periodically to maintain accurate expectations to which other streams in the same region are compared. Harvey Creek is a reference stream in the Florida panhandle; see Figure 1. Harvey Creek flows northwest through Leon County into Lake Talquin.

Samples were collected from Harvey Creek in February of 1998. Benthic macroinvertebrate SCI and BioRecon sampling were conducted; see Figure 2. Water chemistry samples were taken for nitrate-nitrite, total Kjeldahl nitrogen (TKN), total phosphorus, and turbidity analysis; see Figure 2.

## Results

Nutrients in Harvey Creek were very low compared with Florida streams (Figure 2). The SCI score for Harvey Creek was in the "excellent" range; see Figure 2. The BioRecon for Harvey Creek passed all three parameters, giving it a "healthy" evaluation.

Figure 1. Overview Map of the Harvey Creek Area

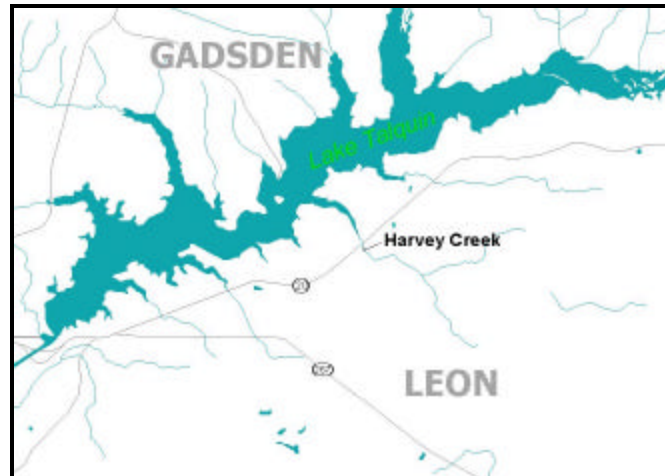


Figure 2. Data Table

| Harvey Creek -- 22020318       |           |
|--------------------------------|-----------|
| Sampling Date                  | 02/24/98  |
| Macroinvertebrate Parameters   |           |
| SCI Score                      | 33        |
| Panhandle Evaluation           | Excellent |
| Biorecon Score                 | 3         |
| Panhandle Evaluation           | Healthy   |
| Physical-Chemical Data         |           |
| Temperature (deg. C)           | 13.4      |
| pH (SU)                        | 4.03      |
| Specific Conductance (umho/cm) | 28        |
| Dissolved Oxygen (mg/L)        | 11.6      |
| Nutrient Data                  |           |
| Nitrate-Nitrite (mg/L)         | 0.04      |
| TKN (mg/L)                     | 0.46      |
| Total Phosphorus (mg/L)        | 0.011     |
| Turbidity (NTU)                | 5.2       |



### FOR MORE INFORMATION, CONTACT:

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