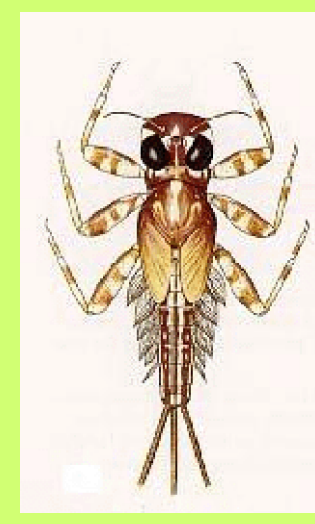
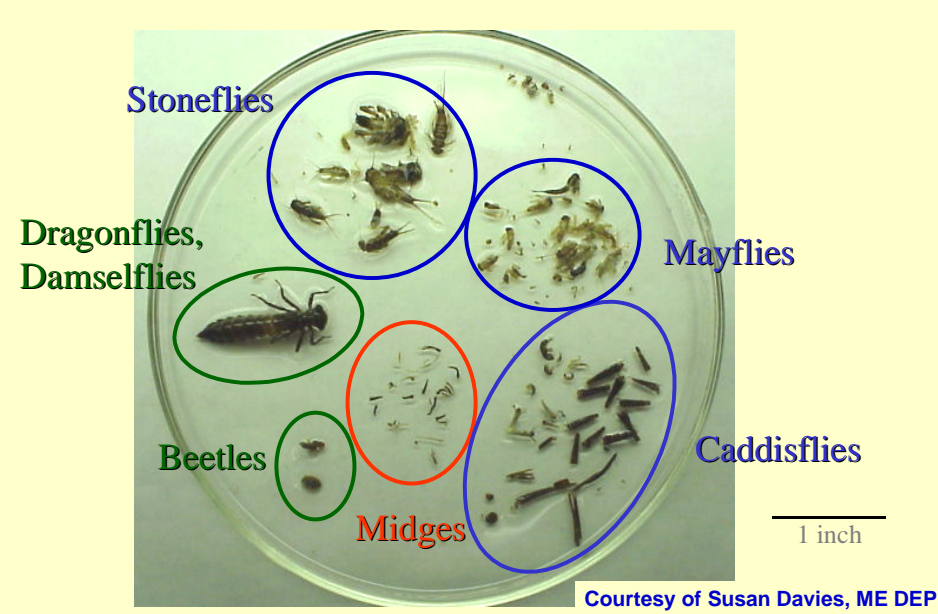


Enhancements to Freshwater Aquatic Assessments for 2006

Combining Fin Fish, Benthic Invertebrate, and Instream Chemistry Data



General Aquatic Life Use

Biological status based on NJIS or Fish IBI alone may lead to a use attainment decision of impairment

Where biological data is not available, evaluation can be made on water chemistry

Minimum dataset required for Aquatic Life assessment based on water chemistry: pH, dissolved oxygen, temperature, total phosphorus, total dissolved solids, total suspended solids

Impaired Conditions:

Biological Scores

- NJIS (benthic macroinvertebrate) <24
- Fish IBI <29

Chemical Exceedances

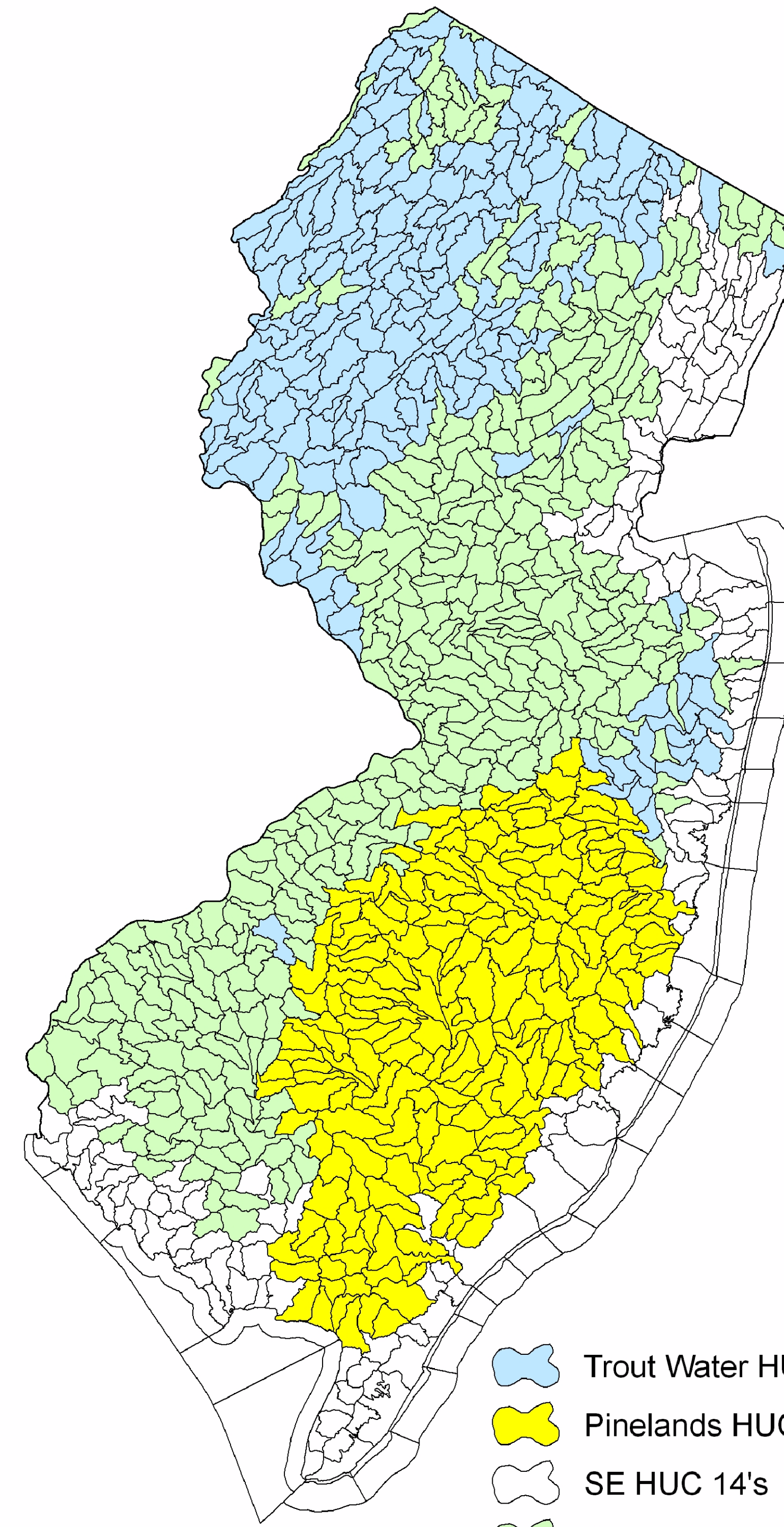
- must have minimum of 2 violations and then examine the following:
- degree of excursion
- number of violations as percentage of dataset
- data from neighboring sites
- other related data



Trout waters are assessed for General Aquatic Life & Trout Status

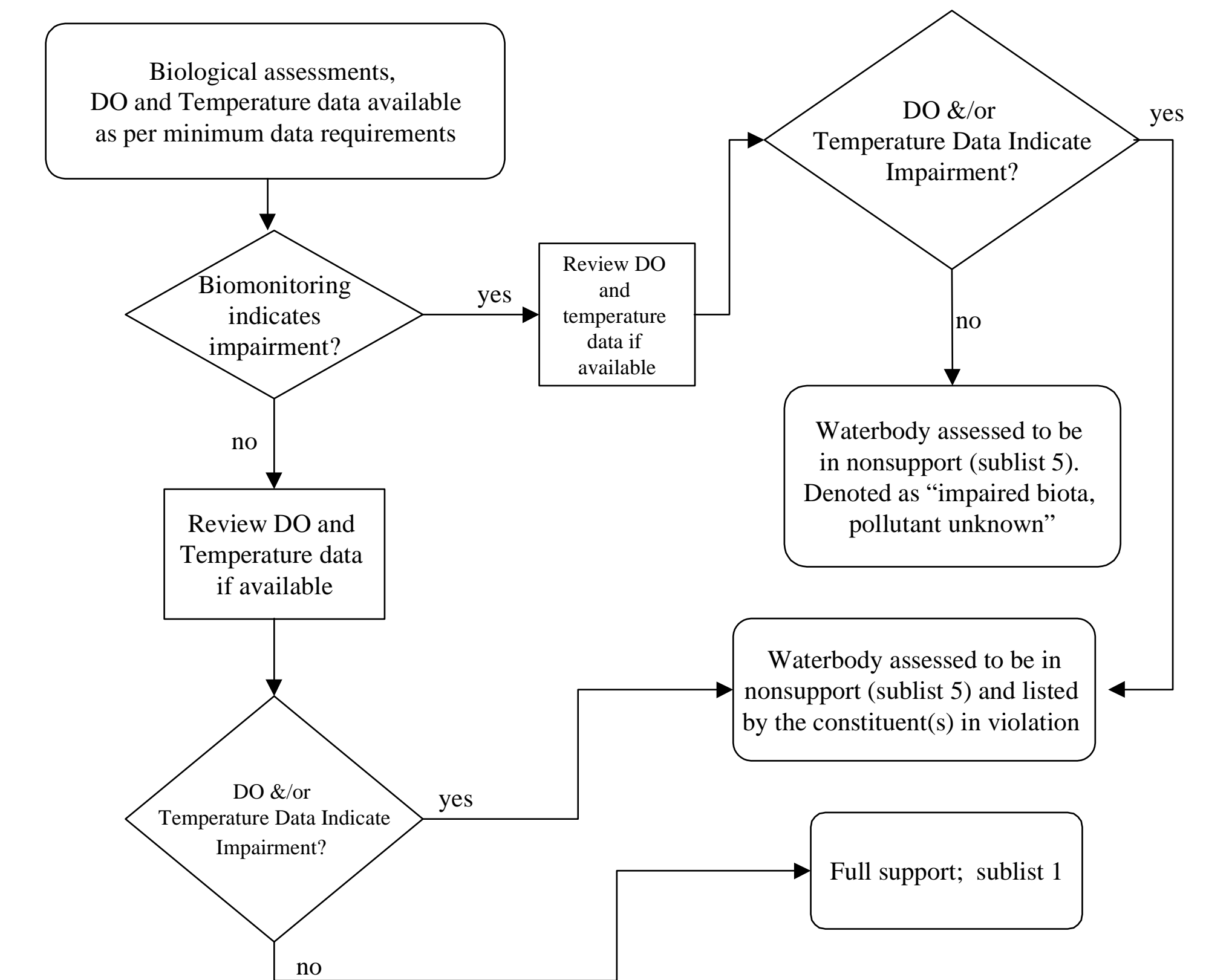
- based upon biological assessments and instream DO and temperature data
- if data show nonimpaired conditions, violations of other chemical parameters will be evaluated by "weight of evidence."
- full dataset: Full or Non Support
- incomplete dataset: Insufficient data

Applicable Aquatic Life Use Assessment

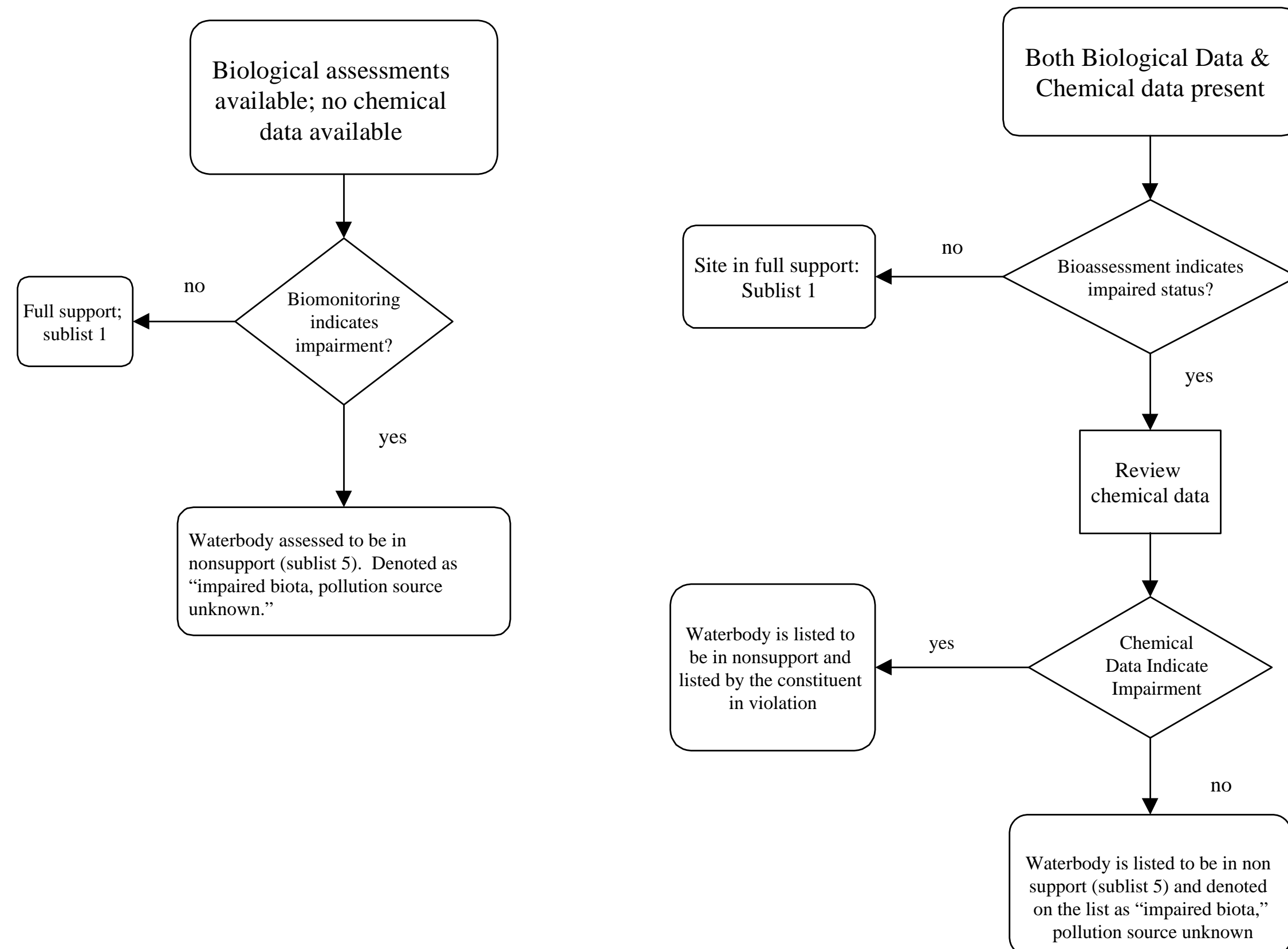


- Trout Water HUC 14's
- Pinelands HUC 14's
- SE HUC 14's
- General Aquatic Life HUC 14's

ASSESSMENT METHOD FOR TROUT PRODUCTION AND TROUT MAINTANANCE WATERS



ASSESSMENT METHOD FOR NON TROUT WATERS



Aquatic Life Assessment within Pinelands (PL) Waters

- Developed by the Pinelands Commission
- Based on stream vegetation, finfish, and anuran assemblages
- New methodology is expected for the 2008 Integrated List

