

What's an RPW?

Piedmont Variety



RECOMMENDATION

- Rapanos - Intermittent streams having 3 month continuous flows
- Piedmont Area – Most consultants contend Intermittent = RPW
- NC Methodology Recommended



**North Carolina
Division of Water Quality**

**Identification Methods
for the Origins of
Intermittent and Perennial streams
Version 3.1**

Effective Date: February 28, 2005



The Methodology

- evaluating 29 different attributes of the stream and assigning a numeric score to each attribute
- “Absent”, “Weak”, “Moderate”, and “Strong” are applied to sets of geomorphic, hydrologic and biological attributes.



SCORING

- Absent The character is not observed
- Weak The character is present but you have to search intensely(i.e., ten or more minutes) to find it
- Moderate The character is present and observable with mild (i.e.,one or two minutes) searching
- Strong The character is easily observable



Geomorphology

- Continuous bed and bank
- Sinuosity
- In-channel structure: riffle-pool sequence
- Soil texture or stream substrate sorting
- Active/relic floodplain
- Depositional bars or benches



Geomorphology (Cont)

- Braided channel
- Recent alluvial deposits
- Natural levees
- Headcuts
- Grade controls
- Natural valley or drainageway
- Second or greater order channel on existing USGS or NRCS map or other documented evidence.



Hydrology

- Groundwater flow/discharge
- Water in channel and > 48 hrs since rain, **or**
Water in channel -- dry or growing season
- Leaf litter
- Sediment on plants or debris
- Organic debris lines or piles (Wrack lines)
- Hydric soils (redoximorphic features) present?



Biological

- Fibrous roots in channel
- Rooted plants in channel
- Crayfish
- Bivalves
- Fish
- Amphibians
- Macrobenthos (note diversity and abundance)



Biological (Cont)

- Filamentous algae; periphyton
- Iron oxidizing bacteria/fungus.
- Wetland plants in streambed



Perennial Stream Indicators

- fish, crayfish (in channel), amphibians (larval salamanders and large, multi-year tadpoles), or clams or
- If only crayfish or fingernail clams - 18 on the geomorphology section OR
- 30 points OR
- > one benthic macroinvertebrate that requires water for life cycle are present as later instar larvae



Intermittent Criteria

- 19 points value to classify a stream as at least “intermittent”.

