Following is a listing of all of the Division of Water Resources' existing aquatic habitat model study sites, sorted by hydrologic stream classification. This is also shown on a google earth map through DWR's Ecological Flows Science Advisory Board web site at: <a href="http://www.ncwater.org/Data\_and\_Modeling/eflows/sab/presentations/20110517/">http://www.ncwater.org/Data\_and\_Modeling/eflows/sab/presentations/20110517/</a>

The listing constitutes our best judgment on stream classification. However, it is important to note that many sites do not have a nearby USGS gage with an unaltered flow record. If these sites are also in a river basin for which a hydrologic model is not yet available, then in most cases there is no flow data to analyze with the stream classification software. These sites are marked with an asterisk and the classification is not yet confirmed (as of 1/5/2012).

### **Existing Habitat Models for Small Flashy (D) Stream Classification**

#### **Neuse River Basin**

- 1. Eno River State Park 99.4 square miles
- 2. Eno River, Hillsborough 66 square miles (convert from mainframe model)
- 3. West Fork Eno River 11 square miles \*
- 4. Swift Creek 74.1, 80.7, & 116.4 square miles (consultant 2D model) \*
- 5. Middle Creek 38.2 & 63.8 square miles (convert from mainframe model)

### Cape Fear River Basin

- 6. Buckhorn Creek, below Harris Lake 76.3 square miles
- 7. Rocky River, Siler City Reservoir 55 square miles \*

#### **Tar River Basin**

8. Tar River, Louisburg – 437 square miles

<sup>\*</sup> small flashy classification to be confirmed

# Existing Habitat Models for Small Seasonal (G) Stream Classification

### **Neuse River Basin**

#### **Cape Fear River Basin**

#### Tar River Basin

#### **Broad River Basin**

\* small seasonal classification to be confirmed

# **Existing Habitat Models for Coastal (A) Stream Classification**

### **Neuse River Basin**

- 1. Little River, upper site, 55 mi<sup>2</sup> (consultant, study in progress)
- 2. Little River, middle site, 90 mi² (consultant, study in progress)
- 3. Little River, lower site, 191 mi<sup>2</sup> (consultant, study in progress)
- 4. Neuse River, near quarry, 787 mi<sup>2</sup> \*

#### **Cape Fear River Basin**

5. Nicks Creek, 26 mi<sup>2</sup>; \*

### **Tar River Basin**

6. Tar River, lower site, 2620 mi<sup>2</sup> (consultant, study in progress) \*

<sup>\*</sup> coastal classification to be confirmed

# **Existing Habitat Models for Large Piedmont (E) Stream Classification**

# **Roanoke River Basin**

- 1. Roanoke River, bypassed reach, 8371 mi<sup>2</sup> \*
- 2. Roanoke River, upper reach, 8384 mi<sup>2</sup> \*
- 3. Roanoke River, north channel, 8402 mi<sup>2</sup> \*
- 4. Roanoke River, south channel, 8407 mi<sup>2</sup> \*
- 5. Roanoke River, below Weldon, 8432 mi<sup>2</sup> \*

### **Catawba River Basin**

6. Catawba River, below Hickory Reservoir (Oxford Dam), 1314 mi<sup>2</sup> \*

### Yadkin - Pee Dee River Basin

- 7. Pee Dee River, below Tillery Dam, 6051 mi<sup>2</sup> \*
- 8. Pee Dee River, below Rocky River confluence, 6303 mi<sup>2</sup> \*
- 9. Pee Dee River, above Blewett Falls Dam, 6694 mi<sup>2</sup> \*
- 10. Pee Dee River, below Blewett Falls Dam, 6863 mi<sup>2</sup> \*
- 11. Pee Dee River, lower N.C. site, 7175 mi<sup>2</sup> \*

<sup>\*</sup> large Piedmont classification to be confirmed

# **Existing Habitat Models for Small Stable (B) Stream Classification**

### **Broad River Basin**

- 1. Buffalo Creek, below Kings Mtn. Reservoir 127 mi<sup>2</sup>
- 2. Roberson Creek, 15 mi<sup>2</sup> \*

#### **Catawba River Basin**

- 3. Catawba River, Muddy Creek confluence below Catawba Dam, 98 mi<sup>2</sup> \*
- 4. Catawba River, Linville Dam tailrace, 383 mi<sup>2</sup> \*

### French Broad River Basin

- 5. Davidson River, 13 mi<sup>2</sup> \*
- 6. Hominy Creek, upper site, 91 mi<sup>2</sup> \*
- 7. Hominy Creek, lower site, 95 mi<sup>2</sup> \*
- 8. Jonathan Creek, 13 mi<sup>2</sup> \*
- 9. Mills River, 71 mi<sup>2</sup> \*
- 10. North Fork Mills River, 10 mi<sup>2</sup> \*
- 11. Bradley Creek, 10 mi<sup>2</sup> \*
- 12. Ivy "River" Creek, 112 mi<sup>2</sup> \*
- 13. Cedar Rock ("Grogan") Creek, 2 mi<sup>2</sup> \*

#### **Hiwassee River Basin**

14. Nottely River, 245 mi<sup>2</sup> \*

### Existing Habitat Models for Small Stable (B) Stream Classification cont'd

# **Little Tennessee River Basin**

- 15. Cartoogechaye Creek, 51 mi<sup>2</sup>
- 16. Dicks Creek, 3 mi<sup>2</sup> \*
- 17. Nantahala River, bypassed reach between dam & Dicks Ck., 91 mi<sup>2</sup> \*
- 18. Nantahala River, bypassed reach between Dicks & Whiteoak Cks., 103 mi<sup>2</sup> \*
- 19. Nantahala River, bypassed reach below Whiteoak Ck., 128 mi<sup>2</sup> \*
- 20. Queens Creek, 4 mi<sup>2</sup> \*
- 21. Tuckasegee "East Fork" River, lower site, 81 mi<sup>2</sup> \*
- 22. West Fork Tuckasegee River, upper site, 39 mi<sup>2</sup> \*
- 23. West Fork Tuckasegee River, middle site, 53 mi<sup>2</sup> \*
- 24. Whiteoak Creek, 13 mi<sup>2</sup> \*
- 25. Wolf Creek, 15 mi<sup>2</sup> \*

#### **Lumber River Basin**

26. Drowning Creek, 186 mi<sup>2</sup>

#### **New River Basin**

27. Middle Fork South Fork New River, 12 mi<sup>2</sup> \*

#### **Savannah River Basin**

- 28. Toxaway River, 16.9 mi<sup>2</sup> \*
- 29. Horsepasture River, upper site, 24 mi<sup>2</sup> \*
- 30. Horsepasture River, lower site, 24 mi<sup>2</sup> \*

#### **Yadkin River Basin**

31. South Yadkin River, 117 mi<sup>2</sup>

<sup>\*</sup> small stable classification to be confirmed

### Existing Habitat Models for Medium Stable (F) Stream Classification

#### **Broad River Basin**

- 1. 1st Broad R.; upper, upstream of Knob Crk., 145 mi<sup>2</sup>
- 2. 1st Broad River; middle, downstream of Shoal Rock Crk., 202 mi<sup>2</sup>
- 3. 1st Broad River; lower, downstream of Hwy. 74, 230 mi<sup>2</sup>

### **Roanoke River Basin**

4. Dan River, at Joyce Mill, 72 mi<sup>2</sup>

#### **Catawba River Basin**

5. Catawba River, near Morganton, 584 mi<sup>2</sup> \*

#### **French Broad River Basin**

- 6. Pigeon River, upper site, 459 mi<sup>2</sup> \*
- 7. Pigeon River, middle site, 479 mi<sup>2</sup> \*
- 8. Pigeon River, lower site, 484 mi<sup>2</sup> \*

#### <u>Little Tennessee River Basin</u>

- 9. Cheoah River, upper site, 178 mi<sup>2</sup> \*
- 10. Cheoah River, upper middle site, 186 mi<sup>2</sup> \*
- 11. Cheoah River, lower middle site, 200 mi<sup>2</sup> \*
- 12. Cheoah River, lower site, 206 mi<sup>2</sup> \*
- 13. Nantahala River, lower mainstem, 144 mi<sup>2</sup> \*
- 14. Tuckasegee River, upper middle site, 360 mi<sup>2</sup> \*
- 15. Tuckasegee River, upper site, 347 mi<sup>2</sup> \*

#### **Hiwassee River Basin**

- 16. Hiwassee River, upper site, 198 mi<sup>2</sup> \*
- 17. Hiwassee River, middle site, 252 mi<sup>2</sup>
  \* medium stable classification to be confirmed

# **Existing Habitat Models for Large Stable (C) Stream Classification**

# French Broad River Basin

1. French Broad R.; below Craggy Dam, 966 mi<sup>2</sup>

### Little Tennessee River Basin

- 2. Tuckasegee River, lower middle site, 598 mi<sup>2</sup> \*
- 3. Tuckasegee River, lower site, 655 mi<sup>2</sup> \*

<sup>\*</sup> large stable classification to be confirmed