Southeast Streamflow Duration Assessment Method

General site information

Project name or number:

Site code or identifier:

Assessor(s):

Waterway name:

Visit date:

Current precipitation:
□ None
□ Rain □ Snow/Ice
□ Light
□ Moderate
□ Heavy
Notes:

Recent weather: (e.g., precipitation in prior week):

Coordinates at downstream end (decimal degrees), Device:

Lat (N):

Long (E):

Datum:

Surrounding land-use within 100 m (check one or two):
□ Urban/industrial/residential
□ Agricultural (farmland, crops, vineyards, pasture)
□ Developed open space (e.g., golf course)
□ Forested
□ Other natural
□ Other:

Describe reach boundaries:

Mean bankfull channel width (nearest 0.1 m):
(Indicator 1)

_____ _____ _____

Reach length (m):
40x width
min 40 m
max 200 m

Site photographs:
Enter photo ID.

Top down: _____ Mid down: _____

Mid up: _____ Bottom up: _____

Disturbed or difficult conditions (check all that apply):
□ None
□ Recent flood or debris flow
□ Stream modifications (e.g., channelization)
□ Diversions
□ Discharges
□ Drought
□ Vegetation removal/limitations
□ Other (explain in notes)

Notes on disturbances or difficult site conditions:

Observed hydrology:

_____ % of reach with surface flow

_____ % of reach with sub-surface or surface flow

_____ # of isolated pools

Comments on observed hydrology:

Site sketch:

1. Mean bankfull channel width (m) (nearest 0.1 m, copy from first page of field form)

Notes about mean bankfull channel width:

Aquatic macroinvertebrate indicators

Collect aquatic macroinvertebrates from at least 6 locations in the assessment reach, searching all suitable habitats on the streambed (including dry habitats, if present).

2. BMI Score

_____ (0-3)

0 (Absent) No aquatic macroinvertebrates observed.
1 (Weak) Total abundance is 1 to 3.
2 (Moderate) Total abundance ≥4
3 (Strong) Total abundance ≥10 and richness ≥3 OR Total abundance < 10 and richness ≥5

Note: Richness is based on family-level identification for aquatic insects and mollusks, order-level for crustaceans and mites, and class or phylum for all other aquatic macroinvertebrates.

Taxa/Notes:

3. Total aquatic macroinvertebrate abundance

Mark the appropriate box for the total number of aquatic macroinvertebrates observed.

☐ No aquatic macroinvertebrates observed.

☐ Total abundance is 1 or 2.

☐ Total abundance is 3 to 40.

☐ Total abundance is 41 or more.

Notes on total aquatic macroinvertebrate abundance:

4. Shading

At the center of three transects, use a modified convex spherical densiometer (see Section 3.8.5 of the NE and SE SDAM) to record the number of points covered by trees, canyon walls, buildings, or other structures that provide shade (up to 17 points per location). Calculate percent shading as the percentage of points covered by such structures (total points covered divided by 204).

Percent shading:_____	*Downstream transect*	*Middle transect*	*Upstream transect*	
Facing upstream	/17	/17	/17	
Facing right bank	/17	/17	/17	Total number of points covered:
Facing downstream	/17	/17	/17	_____ / 204 * 100%
Facing left bank	/17	/17	/17	

Notes on shading:

5. Prevalence of rooted upland plants in streambed

____ (0-3)	Evaluate the prevalence of rooted upland plants (i.e., plants rated as FAC, FACU, UPL, or not listed in the regionally appropriate National Wetland Plant List) in the streambed. 0 (Poor) Rooted upland plants are *prevalent* within the streambed/thalweg (>75%). 1 (Weak) Rooted upland plants are *consistently dispersed* throughout the streambed/thalweg (20-75%). 2 (Moderate) There are *a few* rooted upland plants present within the streambed/thalweg (<20%). 3 (Strong) Rooted upland plants are *absent* from the streambed/thalweg.

Upland Species	**Notes**	**Photo ID**

Notes on rooted upland plants:

6. Particle size of stream substrate

____ (0-3) *Half scores (0.5, 1.5, 2.5) are allowed.*	Compare substrate on the channel bed to the banks and adjacent floodplain. 0 (Absent) The channel is poorly developed, very little to no coarse sediment is present. There is no difference between particle size in the stream substrate and adjacent land. 1 (Weak) The channel is poorly developed through the soil profile. Some coarse sediment is present in the streambed but is discontinuous. Particle size differs little between the stream substrate and adjacent land. 2 (Moderate) There is a well-developed channel, but it is not deeply incised through the soil profile. Some coarse sediment is present in the streambed in a continuous layer. Particle size differs somewhat between the stream substrate and adjacent land. 3 (Strong) The channel is well-developed through the soil profile with relatively coarse streambed sediments compared to the riparian zone soils: coarse sand, gravel, or cobbles in the piedmont; cobbles or boulders in the mountains, and medium or coarse sand in the coastal plain. Particle size differs greatly between the stream substrate and adjacent land.
Notes about particle size of stream substrate:	

7. Prevalence of fibrous roots in the streambed

____ (0-3) *Half scores (0.5, 1.5, 2.5) are allowed.*	Evaluate the extent of fibrous roots in the streambed. 0 (Absent) A strong network of fibrous roots is persistent in the stream thalweg and surrounding area. 1 (Weak) A discontinuous network of fibrous roots is present in the stream thalweg and surrounding area. 2 (Moderate) Very few fibrous roots are present anywhere in the streambed. 3 (Strong) No fibrous roots are present.
Notes about fibrous roots:	

8. Drainage area (in square miles, if < 1 round to the nearest 0.001)

	Notes about Drainage, including method/tool(s) used to calculate:

9. Elevation (m)

10. Average monthly precipitation for May, June, July (SE only) (mm)

Photo log

Indicate if any other photographs taken during the assessment:

Photo ID	Description

Additional notes about the assessment including observations of fish (other than mosquitofish, *Gambusia* sp.):

Model classification:

- ◯ Ephemeral
- ◯ At least intermittent
- ◯ Intermittent
- ◯ Less than perennial
- ◯ Perennial
- ◯ Needs more information