Habitat Parameter	4	3	2	1
8. Pool Variability Assess pool size and depth. Shallow=less than 18 inches deep. Score pools within entire 300 feet.	All size/depth combinations present: 1. large-shallow 2. large-deep 3. small-shallow 4. small-deep	Majority of pools: 1. large-deep	Majority of pools: 1. shallow	Majority of pools: 1. small-shallow or 2. absent
Total score:_____	4	3	2	1
9. Pool Substrate Assess bottom materials within pools. Score pool areas only.	Mixture of substrate materials with gravel and firm sand prevalent. Root mats, submerged vegetation or other fish cover common.	Mixture of soft sand, mud, or clay; mud may be dominant. Some root mats, submerged vegetation or other fish cover present.	All mud or clay or sand bottom. Little or no root mat, submerged vegetation, or other fish cover.	Hardpan clay or bedrock, no cover of any kind for fish or other aquatic life.
Total score:_____	4	3	2	1
10. Attachment Sites for Macroinvertebrates; Shelter for Fish Assess habitat structure for fish and macroinvertebrates. Score entire 300 ft.	Over half of the site has submerged logs, snags, undercut banks or other stable habitat that provides cover for fish and aquatic life.	One-third to one-half of the site has submerged logs, undercut banks or other stable habitat.	Less than one-third of the site has submerged logs, undercut banks or other stable habitat.	Very little fish habitat; lack of habitat for fish and aquatic life obvious.
	4	3	2	1

Grand Total:_____
(Record on front)

Habitat Check-List ✓ for Soft Bottom Streams

A soft bottom stream is characterized by naturally occurring muddy, silty, sandy substrate in any combination. These streams are slow-moving, low-gradient streams with few or no riffle areas.

Before you begin, please check the following Quality Assurance procedures:

- ☐ Coordinator verified that this is a soft bottom stream.
- ☐ Marked off 300 foot segment on bank for assessment.
- ☐ No unusual odors. (If so, report it to the local DNR office and *do not* enter the water).
- ☐ Normal water appearance. (If not, report it to the local DNR office and *do not* enter the water).
- ☐ Normal water level and it is safe to enter the stream.

Date of Assessment:_____

Name: _____

Stream Name: _____

Location: _____ (County, Road (s), etc.)

ID: _____

TOTAL SCORE (Add up all 10 parameters): ☐

Office Use Only

How does this stream compare to watershed average score? (Circle your choice):

BELOW

AVERAGE

ABOVE

Office Use Only

Watershed Average Score:

Spring 2002

Photographs are Included: Circle YES or NO

Habitat Assessment Check-List for Soft Bottom Streams

Directions: Each parameter is listed in the column along the left-hand side, starting with riparian vegetation. Read each numbered category in the row to find the best match for your stream. Circle the number in that category. Add up your scores for both left and right banks (or one total score) and enter total at left under parameter description. **Determine left or right bank by looking upstream (where water is coming from).**

Habitat Parameter	4	3	2	1
1. Riparian Vegetation Estimate width of riparian vegetation along each bank for entire 300 ft. Left Bank:_____ Right Bank:_____ Total Score:_____	Width of riparian vegetation is more than 50 feet; no evidence of human activities (e.g. parking lots, roadbeds, mowed areas, crops, clearcuts) within the zone. Left Bank: 4 Right Bank: 4	Width of riparian vegetation is 36-50 feet. Left Bank: 3 Right Bank: 3	Width of riparian vegetation is 20-35 feet. Left Bank: 2 Right Bank: 2	Width of riparian vegetation is less than 20 feet. Left Bank: 1 Right Bank: 1
2. Bank Vegetation Estimate percentage of vegetation along each bank for entire 300 ft. marked area. Left Bank:_____ Right Bank: _____ Total Score:_____	More than 90% of the streambank surfaces covered by natural vegetation, including trees, shrubs, or other plants. No evidence of grazing or mowing; almost all plants allowed to grow naturally. Left Bank: 4 Right Bank: 4	Seventy to 90% of the streambank surfaces covered by natural vegetation; plant variety limited to one or two species. Slight vegetative disruption evident. Left Bank: 3 Right Bank: 3	Fifty to 69% of the streambank surfaces covered by vegetation. Patches of bare soil or closely cropped vegetation more common. Left Bank: 2 Right Bank: 2	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very common; vegetation has been cut to 2 inches or less; resembles a lawn. Left Bank: 1 Right Bank: 1
3. Bank Stability Note: LUNKER structures and other artificial modifications are classified as channel alterations in #4. Score entire 300 ft. Left Bank:_____ Right Bank:_____ Total:_____	Banks stable—no evidence of erosion or bank slumping (less than 5%). Left Bank: 4 Right Bank: 4	Moderately stable; infrequent, small areas of erosion mostly healed over with new vegetation evident. Left Bank: 3 Right Bank: 3	Moderately unstable; over half of banks in site have areas of erosion; high erosion potential during floods (no vegetation, steeply sloping banks) Left Bank: 2 Right Bank: 2	Unstable; many eroded areas; bare areas frequent along straight sections and bends; obvious bank collapse or failure; half to all of the bank has erosional scars. Left Bank: 1 Right Bank: 1
4. Channel Alteration Estimate extent of channel modification for entire 300 ft. marked area. Total score:_____	Stream with normal or meandering pattern. No channelization, dredging or artificial structures (LUNKERS, riprap, etc.). 4	Some stream straightening, artificial structures or dams are present, (usually in area of bridge abutments) no evidence of recent channel alteration activity. 3	Artificial structures present on both banks and more than half of stream site straightened, dredged or otherwise altered. 2	Banks shored with gabion (a fortified embankment) or concrete. 1
5. Channel Flow Status Assess water level within stream channel for entire 300 ft. Total Score:_____	Water reaches base of both shorelines and a minimal amount of channel substrate is exposed. 4	Water fills more than 75% of the channel; some channel substrate is exposed. 3	Water fills about half of the channel and/or riffle substrates are mostly exposed. Water is shallow. 2	Very little water in channel; banks blown out by excessive erosion and the normal flow does not reach the new shorelines. 1
6. Channel Sinuosity Assess how bends in the stream affect its length. Score entire 300 ft. Total Score:_____	The bends in the stream increase the stream length by three or four times if the channel were straightened out. 4	The bends in the stream increase the stream length more than two to three times if the channel were straightened out. 3	The bends in the stream increase the stream length one to two times if the channel were straightened out. 2	Channel is straight; waterway has been straightened for a long distance. 1
7. Sediment Deposition Sediments are naturally deposited in slow-flow sections. High levels of deposition create an unstable, continually changing bottom. Score entire 300′. Total score:_____	Very little of bottom affected; minor accumulation of fine and coarse material at snags and submerged vegetation; little or no enlargement of islands or point bars. 4	Less than half of the bottom affected; moderate accumulation; substantial sediment movement only during major storm event; some new increase in bar formation. 3	More than half of bottom affected with major deposits; pools shallow, heavily silted; large deposits may be present on both banks; sediment deposits are an obstruction to the water flow. 2	Heavy deposits of fine material. Increased bar development. More than 50% of the bottom changing frequently. Pools almost absent due to substantial sediment deposition. 1 (flip over)